

# U.S.I. JOURNAL

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The Dragon and the Thunderbolt

Military Dimensions in the Future  
of the Indian Presence in Space - *Dr V Siddhartha*

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Understanding Infantry - *Lt Gen H B Kala*

Army Training Command :  
A Perspective - *Lt Gen Vijay Oberoi*  
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APRIL-JUNE 2000

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ISSN 0041-770X

The  
**Journal**  
of the  
**United Service Institution**  
of  
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Published by Authority of the Council



(Established : 1870)

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Rao Tula Ram Marg, (opposite Signals Enclave)  
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Telephone No. 6146755, 6146490 Fax: 6149773  
e-mail : dirusi@nde.vsnl.net.in

Homepage - [www.members.tripod.com/usiofindia/htmlpages/Main.htm](http://www.members.tripod.com/usiofindia/htmlpages/Main.htm)

**Vol CXXX**

**April-June 2000**

**No. 540**

USI Journal is published quarterly in April, July, October and January.  
Subscription per annum : In India Rs. 250.00. Subscription should be sent to the Director. It is supplied free to the members of the Institution.

Articles, correspondence and books for review should be sent to the Editor. Advertisement enquiries concerning space should be addressed to the Director.

For overseas subscriptions, trade enquiries and advertisements write to : Spantech & Lancer, Spantech House, Lagham Road, South Godstone, Surrey RH9 8HB, UK.

Overseas annual subscription (By Air Mail) - £ 40 or \$ 65  
Tel : +44 1342 893239 Fax : +44 1342 892584

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## EDITORIAL

The canvas of activities of the United Service Institution of India is gradually expanding. A Centre for Armed Forces Historical Research is being set up to commission and encourage research and study into the history of the Indian Armed Forces, for an objective understanding of events that have taken place, and to record for posterity the lessons that have been learnt.

The second major initiative that has come to fruition is the approval by the Executive Committee for the establishment of a Centre for International Peacekeeping Studies and Training. This approval is subject to formal ratification by the USI Council at its next meeting in December 2000. The purpose of this Centre is to build an international flavour into the existing training facilities, to train contingents and observers proceeding on peacekeeping missions, exploiting the wealth of expertise and talent available within India on the subject. It is intended to conduct training for personnel from friendly foreign countries, as also practical training for own personnel.

An essential requirement for national security policy making is the need to have proper institutional arrangements and mechanisms for continuous and speedy evaluation of issues and for arriving at timely decisions. To complement the three-tier National Security Council, a 19-member National Security Advisory Board has been reconstituted during May 2000. The Board consists of eminent persons from outside the Government, who specialise in fields such as foreign affairs, external and internal security, defence, economics and science and technology. It is a matter of pride that nine out of 19 on the National Security Advisory Board are members of the United Service Institution of India, viz, Shri K Subrahmanyam, Maj Gen Afsir Karim, AVSM (Retd), Shri K Raghunath, Shri MK Rasgotra, General SF Rodrigues, PVSM, VSM (Retd), Admiral VS Shekhawat, PVSM, AVSM, VrC (Retd), Air Cmde Jasjit Singh, AVSM, VrC, VM (Retd), Shri NN Vohra and Prof M Zuberi.

Global developments appear to indicate that the centre of gravity of conflicts is likely to shift from Europe to the Persian Gulf, Central Asia and the Asia Pacific Region. An article titled 'The Dragon and the Thunderbolt' has been included as the lead article in this issue. The focus of the article is on the fielding of National Missile Defence (NMD) and Theatre Missile Defence (TMD) Systems by the United States in the Asia-Pacific Region. The People's Republic of China perhaps views it as an instrument of US hegemonic policy, an "Asian edition of NATO". Containment of China is regarded as a credible strategic US objective. By integrating Taiwan into the TMD System, the US may upset China's objective of reunifying Taiwan with the mainland. It appears that the Chinese for the present do not wish to get into a debilitating arms race unless it is unavoidable. However, if the People's Republic of China develops the firm perception that the United States is intent on freezing its strategic advantage permanently, China's national interests may set them on a collision course. In that eventuality, it may be the beginning of another cold war, with the People's Republic of China replacing the erstwhile USSR as the competing power against the USA.

## The Dragon and the Thunderbolt

**O**rigins of the emerging crisis in the East Asia-Pacific on the issues of National Missile Defence (NMD) and Theatre Missile Defence (TMD) can be traced back to the Taiwan missile crisis in March 1996. Despite Chinese efforts to place responsibility entirely on the United States and Japan, and notwithstanding genuine doubts that China has about the intended target, the Chinese must share the responsibility for the concept of Missile Defence gaining ground in East Asia in the wake of the missile crisis. In a sense, the Chinese attempt to use missile exercises to demonstrate their resolve in preventing the independence of Taiwan has backfired on China. References in a mainland-backed newspaper<sup>1</sup> to efforts by the Pentagon to spread "the so-called Mainland guided missile threats to Taiwan theory" in order to create the conditions for the development of anti-missile defence systems, is an acknowledgement of this fact. One possible way of analysing Chinese reaction is along a time-line, which can be divided into four broad segments.

### From Early 1997 to June 1998 – Ignoring the Signals

Some Chinese strategic and academic publications during 1997 and 1998 carried expressions of concern in varying degrees about the development of the TMD and its impact on China's strategic forces. When such concerns are voiced in the media or in 'open' articles published by strategic think tanks in China, they are generally deemed to reflect official perceptions. Despite this, the Chinese government did not take steps to raise the temperature. Why was this so? Among possible reasons, three stand out.

- (a) It is possible that initially the political and policy-making levels in China did not fully understand its scope or strategic significance. They tended to see it more in terms of another weapon meant for Taiwan in violation of the 13 August 1982

Joint Communique, rather than as a strategic counterforce against China.

(b) The failure of the Theatre High Altitude Area Defence (THAAD) tests may also have beguiled the Chinese into a sense of complacency, especially when senior US officials seemed to give assurances that TMD was no more than merely a concept.

(c) The Washington and Beijing Summits undoubtedly enhanced China's international stature as a strategic partner, while the South Asian nuclear tests in 1998 may have diverted the attention of Chinese experts away from anti-missile defence systems.

There are reasonable grounds to believe that a gap may have continued to exist for some time between the professional and political levels about its implications. There is no public evidence that President Jiang Zemin raised Chinese concerns about missile defence with President Clinton during the 1997 or 1998 summit meetings. Press releases by the US Assistant Secretary of State for Arms Control and Disarmament in March 1998, following his talks in Beijing pursuant to the agreement during the Washington Summit that both sides would have consultations on arms control issues, makes no mention of discussion about this issue.<sup>2</sup> Nor is it mentioned in the pre-summit interview given by Chinese Foreign Minister Tang Jiaxuan in June 1998 on the eve of Clinton's visit to China. It is probable that although by that time professional concerns, especially on the part of the People's Liberation Army (PLA) would have been known to the top Chinese leadership, the desire on the part of China's political leaders to capitalise on the South Asian nuclear tests to strengthen relations with the United States could have led to a conscious decision to play down the matter.

The issue might have been raised in some bilateral dialogues with the US. But during visits by the US Vice President, Secretary of State and National Security Advisor in 1997, and by the Secretaries of State and Defence in 1998, none of the leaders involved talked about it, which suggests that it did not figure prominently in their discussions.



### August 1998 to March 1999 – Crystallisation of Policy

To a certain degree, the rapid escalation in temperature that occurred over the next nine months should be seen in the context of events beyond Chinese control. The most prominent of these was the North Korean missile test in September 1998. The subsequent sequence of events, leading to the concretisation of the US and Japanese plans to co-operate on the joint development of an anti-missile defence system, drove home to China in a concentrated time-line the specificity of the challenge that it faced.

The first public reference from government officials came in the latter half of 1998 after the Beijing Summit. The Director General of the Arms Control and Disarmament Division of the Chinese Foreign Ministry told a pro-China Hongkong newspaper that "Japan is making a big fuss about [North] Korea's satellite launch and using this as a pretext for jointly developing with the US a missile defence system. I personally believe this act does absolutely nothing to help peace and stability on the Korean Peninsula."<sup>3</sup> At almost the same time, the Deputy Director General of the Arms Control Division told a plenary meeting of the UN Conference on Disarmament in Nagasaki that "countries concerned should stop immediately the research on and development of advanced missile systems and outer space weaponry."<sup>4</sup> Both these statements found no mention in the mainland press, indicating that there was still no officially sanctioned public position. What appeared in the mainland press in the same month as these two comments by Chinese officials was the reference by the Presidents of China and Russia in a Joint Statement upholding the Anti-Ballistic Missile (ABM) Treaty as "one of the foundation stones for maintaining the world's strategic stability." This important formulation in a summit document suggests that the implications of the missile defence issue were sufficiently well known inside the Chinese arms control bureaucracy by now to become an 'issue of concern'. It also suggests that Russia played a critical, if low-key, role in raising Chinese political consciousness about the implications of missile defence.

In early 1999 such concerns had crystallised sufficiently to allow for official expression on the issue publicly. Sha Zukang,

Director General of the Arms Control and Disarmament Division, told the 7<sup>th</sup> Annual Carnegie International Non-Proliferation Conference in Washington on 11 January 1999 that China was "deeply concerned about certain countries' efforts to develop advanced TMD or even NMD...." He noted that it would negatively impact on regional and global strategic stability. "China's opposition to US transfers of TMD to Taiwan is also based on another major concern, namely, its adverse impact on China's re-unification."<sup>5</sup> Concerns about what it would mean for the mainland's reunification with Taiwan and for Chinese national security also began to find its way into print, a sign that the government was moving towards a firm policy on the matter. Several senior Chinese national security experts criticised the US policy at the end of January 1999. Ou Yang Liping of the Chinese Institute for Contemporary International Relations was quoted as saying that "should the US bring Taiwan into its proposed anti-missile scheme, Sino-US relations would suffer a setback unprecedented since the normalisation of relations."<sup>6</sup> Another official publication criticised theatre missile defence as a "major potential threat to the security of Asia, especially China," and said it would seriously weaken China's missile defence capabilities.<sup>7</sup> Media reports from Taiwan hinting at possible Taiwanese interest in some aspects of anti-ballistic missile defence technology may have enhanced concerns on the mainland.<sup>8</sup>

The international community's first proper introduction to the Chinese reaction was the *Financial Times* article published on 26 February 1999. It was based on an interview with an unidentified Chinese official believed to be Sha Zukang himself. The unidentified official called the TMD shield for Taiwan, Japan and South Korea as the beginning of a cold war policy of containment against China. He voiced the fear that it could also be interpreted as US recognition for a separate Taiwanese identity. He said it also constitutes a violation of the Missile Technology Control Regime (MTCR). The *Financial Times* quoted the Chinese official as saying that "since the US can lead the way in breaking this [MTCR] regime, other countries have the absolute right not to follow the rules of this regime and undertake cooperation on missiles and missile technology with third countries."<sup>9</sup>

Although on-the-record policy statements from Chinese leaders were to follow, Sha Zukang's address to the Carnegie Conference and the interview that he is believed to have given to the *Financial Times* were more than mere expressions of concern. His categorisation of the MTCR (which the Chinese had finally agreed with Clinton in June 1998 to 'actively' study) as a "time winning device", and the implicit reference to possible Chinese non-co-operation with the US on missile transfers represented the first crude tactical response to the TMD. It was also an indication that policy had crystallised at the highest level.

Typically, the Chinese did not air views at the political level before checking out their concerns with the US one last time. They took it up with the US in early March 1999. US Secretary of State Albright disclosed during a press conference in Beijing on 2 March 1999 that "Chinese officials expressed concern about the possible deployment in the region of systems for theatre missile defence. I replied that instead of worrying about a decision that has not been made to deploy defensive technologies that do not yet exist, China should focus its energies on the real source of the problem – the proliferation of missiles."<sup>10</sup> Two other simultaneous developments focussed international attention on the matter. On the same day that Albright was in Beijing, Taiwan's President Lee Teng-hui told the *Financial Times* that his government was interested in the US-led TMD shield to protect itself against the reported build-up of Chinese missiles.<sup>11</sup> The same day the mainland-backed *Ta Kung Pao* issued a clear warning: "If the US brings Taiwan into the [TMD] system, not only will Sino-US relations meet a setback, but their cooperation in nuclear non-proliferation will also be undermined."<sup>12</sup>

Having presumably got the necessary inputs from Chinese agencies and after studying the US reactions, March 1999 was the month in which the Chinese revealed their policy approach. It had taken them nearly nine months to pull the various strands together into the makings of a rudimentary policy. In the typical fashion of Chinese diplomacy, the escalation was graduated and intended to leave no doubts about the message or that it represented the official view. On 7 March 1999 the Foreign Minister enunciated

Chinese concerns in clear terms.<sup>13</sup> "The development and research of TMD does not go with the trend of the times. Nor is it conducive to international disarmament efforts and it will exert a negative impact on the global and regional security balance and stability in the next century." He went on to add that "I wish to point out emphatically if some people intend to include Taiwan in TMD, it would amount to an encroachment on China's sovereignty and territorial integrity, and will be an obstruction to the great cause of peaceful unification of the motherland." The message was reinforced by Jiang Zemin's close advisor and point man on Taiwan, Wang Daohan, in an interview to the *New York Times* on 25 March 1999. He said that US deployment of TMD in Taiwan would be "like playing with fire," and "that will completely disrupt the current world situation and instead a new Cold War would appear."<sup>14</sup>

The formal expression of China's position at the highest level came immediately thereafter at a special address by the Chinese President to the UN Conference on Disarmament in Geneva on 26 March 1999.<sup>15</sup> He said:

Progress in nuclear disarmament cannot be achieved without a global strategic equilibrium and stability. The research, development and proliferation of sophisticated anti-missile systems and revision of, or even withdrawal from, the existing disarmament treaties on which global strategic equilibrium hinges will inevitably exert an extensive negative impact on international security and stability and trigger off a new round of arms race in new areas, thereby seriously obstructing or neutralizing international efforts of nuclear disarmament and nuclear non-proliferation. The international community should pay close attention to this and adopt necessary measures to pre-empt such dangerous developments.

Finally, as if to underline the message in case the US or Japan had misread it, Chinese Premier Zhu Rongji reiterated the policy in his interview to *The Globe & Mail* of Canada on the eve of his visit to the United States.<sup>16</sup> He put it in the following terms:

- "In our view to establish the TMD system does not conform with existing international treaties on missiles."

- "China is firmly opposed to the inclusion of China's Taiwan into the TMD because that would mean encroachment upon China's sovereignty and also constitute interference in our internal affairs."
- "I believe that the Americans know only too well what kind of missiles the [Democratic People's Republic of Korea] DPRK has and whether the DPRK has nuclear weapons at all. It is our assumption that the DPRK does not pose a threat. It should not serve as a pretext for the development of the TMD."

With these top-level policy pronouncements, the 'line' appeared set. It contained three principal elements:

- (a) R&D of anti-missile systems have implications for the global strategic equilibrium, and hence for China's nuclear arsenal.
- (b) Its deployment in the region would be interpreted as 'anti-Chinese' in orientation.
- (c) Its extension to Taiwan in any form would be considered a direct threat to China's national security.

A comparison between leadership statements and writings by strategic experts around this time still reveal some gaps. The leadership still spoke about it largely in terms of what it would mean for reunification of China. The experts, on the other hand, were already viewing it in the larger strategic framework of Chinese national security. From publicly available information it is not possible to postulate whether the gap reflected the leadership's limited understanding of strategic implications, or a tactical decision on their part to keep the temperature under control. The latter is not unlikely, since Zhu Rongji was to visit the US in mid-April for crucial World Trade Organisation (WTO) negotiations and the vision of 'strategic partnership' still shone before their eyes.

#### **April to November 1999 – Pro-active policy**

The war in Kosovo, which was viewed by the Chinese as a US-led action that redefined the international standards of human

rights and the obligations of the international community, was a watershed for the Chinese in terms of their reactions to missile defence as well. Their focus suddenly shifted back to the larger picture of US global hegemonism. The bombing of the Chinese Embassy in Belgrade sharpened this image in the eyes of Chinese public opinion, and tended to create the impression that hardliners were now dictating the government's opposition to the anti-missile defence plan. This may partly have been true, but the onus for escalation did not solely lie with the Chinese. Several events occurred during this time that caused the Chinese to rethink their position.

At the end of April 1999, the Japanese Diet legislated the new Japan-US Defence Guidelines. Although this had no direct bearing to TMD, it lent credibility to the deep suspicions about the "eastern edition of NATO"<sup>17</sup> that had welled-up anew in China since the Kosovo war. 10 June 1999 marked the date of the first successful interception test for THAAD. On 23 July 1999 Clinton signed the National Missile Defence programme into law. On 16 August 1999 Japan and the US formalised their co-operation on the TMD. Almost immediately thereafter, the US signaled its intention to seek revisions to the ABM Treaty. The Chinese seem to have tentatively concluded by April 1999 that the Americans intended to proceed with the NMD/TMD. On 11 May 1999 the Chinese Permanent Representative in Geneva, Li Changhe, said that "a certain country announced its plan to speed up its work on the 'National Missile Defence' (NMD) and 'Theatre Missile Defence' (TMD) and demanded to revise the 'Anti-Ballistic Missile Treaty' (ABM). This decision will have profound negative influence on the global and regional strategic balance and stability and trigger a new round of arms race to the detriment of international disarmament process." Subsequent events only tended to confirm the pattern discerned by them.

In a wide ranging interview to the *World Affairs* magazine, which is affiliated to the Chinese foreign policy establishment, Sha Zukang summed up the four concerns that China had on the issue of the anti-missile defence system.<sup>18</sup> Although difficult to confirm, it possibly reflected the thinking at the highest policy making levels.

- (a) China was the intended target because the limited capability of the NMD was insufficient against the Russian nuclear arsenal.
- (b) TMD was tantamount to missile proliferation.
- (c) Japan's acquisition of such technologies would help her walk "down the road to nuclear weaponization."
- (d) US intentions were to draw Taiwan into the ambit of the TMD.

Sha Zukang also placed on record two specific 'responses' that China was willing to consider. Sha said that "if the US does not make a fresh start, nuclear non-proliferation and related disarmament and arms control measures will begin to collapse." He suggested that China would reconsider ratification of the CTBT in the new circumstances, thus holding out the clear threat of reversing the trend of Chinese co-operation and participation in global arms control mechanisms and treaties. Sha also said that "if the situation persists China will have to conduct a review of its several policies of arms control, disarmament and non-proliferation." China thus also held out a clear threat of non-cooperation in 'curbing' proliferation of weapons of mass destruction.

As the Chinese watched the sequence of events unfold in June-July 1999 culminating in the exchange of notes between Japan and the US on TMD, it only tended to confirm the dominant view about the new threat to China's national security. A shift to a more pro-active policy to counter the problem can be discerned at this time, although it is possible that the decision to do so may have been taken earlier. China's pro-activity was on two fronts – diplomatic and military.

The new diplomatic efforts were focussed on joining with Russia, the other principal opponent to the US NMD project, to counter the US in international forums. Even as Zhu Rongji was visiting Washington, Russian Deputy Minister Mamedov and Chinese Assistant Foreign Minister Wang Guangya were consulting in Moscow. At the end of these consultations, they issued a Joint

Press Communique<sup>19</sup> on 14 April 1999 in which "the two sides voiced their grave concern at the fact that plans announced in the US to prepare a national anti-missile defence system for deployment are currently posing a serious threat that the ABM Treaty may be undermined." The document also said that such actions on the part of the US would be destabilising and lead to resumption of the arms race.

For China, its public siding with Russia less than a year after its 'strategic partnership' with the United States on a national security matter, must have come after a full consideration of the implications. It shows the depth of Chinese concern. The *People's Daily* wrote that "the (NMD/TMD) system was actually directing the spearhead against China because, except for Russia, China is the only one country that is able to use tactical and strategic missiles to attack the US territory as well as overseas missile bases."<sup>20</sup> The April 1999 meeting in Moscow was to be followed by a second consultation in August 1999 in Beijing at which Russia and China discussed the possibility of further action. ITAR-TASS agency quoted a senior Russian official as saying that China is 'highly concerned' over the TMD.<sup>21</sup> The public projection of this meeting by the Russians creates the impression that the Chinese had moved from the earlier passive position into a pro-active position on the issue by mid-1999. Chinese diplomatic efforts culminated in a UN General Assembly Resolution that it co-sponsored with Russia in November 1999 to temporarily deny the US international legitimacy in its efforts to gain strategic advantage through revisions to the ABM Treaty.

The Chinese simultaneously moved on the military front as well. On 2 August 1999 they tested a new version of the Dong Fang 31 (DF-31) long-range missile, which is believed capable of hitting US territories.<sup>22</sup> Although the US dismissed the missile launch as "nothing new,"<sup>23</sup> the significance lay not in the weapon itself but in the timing of the launch, a signal that the US strategic community would have immediately registered. In mid-October 1999 a mainland Chinese newspaper quoted China's highest ranking military leader, General Zhang Wannian, as saying that approval had been given for an additional allocation of RMB 80 billion (about US\$ 10 billion) for improving the second strike capability and counter-strike



capability of Chinese strategic nuclear forces.<sup>24</sup> Finally, news began to 'leak' out of Hongkong in mid-November 1999 about an anti-missile system that the Chinese were developing referred to in press reports as the KDI system. Hongkong papers reported that a successful test had taken place over a 25 kilometre range and a maximum speed of Mach 4.<sup>25</sup>

### Looming Confrontation

China's determined opposition to the NMD/TMD based on threat-assessment to its national security appears to be leading it down a path of diplomatic confrontation with the United States. Early in the New Year, leading Chinese arms control experts opined that the deployment of a missile defence system in East Asia (TMD) may have become inevitable. A renowned arms control scholar from Shanghai's Fudan University, Professor Shen Dingli, said that "the strengthening of the 'shield' (missile defence) will force other countries to sharpen their 'spears'".<sup>26</sup> The objective of Chinese policy now appears to be to stop the sale of TMD systems to Taiwan, and to preserve the current global strategic balance of nuclear forces by averting amendments to the ABM Treaty. Nationalism and pragmatism appear to be the driving forces behind Chinese policy in equal measure. Chinese scholars and officials have long believed that neutralisation of China's strategic forces will open the flood-gates of Taiwan's independence and also lead China into an economically ruinous arms race.

The Chinese conveyed both these concerns to the US at the first military-to-military exchange that was held in January 2000 after nearly nine months of suspension. When General Xiong Guangkai, Deputy Chief of General Staff (CGS) of the PLA met Walter Slocombe, Under Secretary for Defence, at the Consultative Talks in Washington on 27 January 2000, the Chinese made clear that they did not agree with the US going forward with NMD. "They (also) made clear that they would prefer to see the ABM Treaty unchanged."<sup>27</sup> Slocombe also reacted to earlier Chinese warnings of non-cooperation on WMD (Weapons of Mass Destruction) proliferation by saying that "we made clear that we attach very great importance to their strictly complying both with their legal

obligations and with some political undertakings that they've made to the United States." The US efforts to reassure the Chinese about the intentions of the NMD/TMD both during the Defence Consultative Talks in January 2000 and again during the visit of the high level US team led by Deputy Secretary of State Strobe Talbott in February 2000 had no apparent effect. A senior US official, believed to be Talbott, told *Reuters* in a background briefing that "the Chinese have deep misgivings and very firm opposition" to NMD/TMD, and that they clearly want the US to change policy. On their part, the Chinese were quick to dismiss the 'rogue states' pretext for NMD/TMD as untenable. China's spokesman urged the US to consider the "political and strategic price it would pay" for the policy.<sup>28</sup> China demanded that the US should neither carry out tests nor deployment.

### Future Scenarios

Is the distance between the two powers too great to bridge? The Chinese took some time to understand the full implications of the NMD/TMD. Their position is still evolving on the basis of a likely assessment that TMD in East Asia may already have become inevitable. Rhetorically, the Chinese made clear in two separate statements at the UN Conference on Disarmament in Geneva on 27 January 2000 and 24 February 2000 that opposition to space-based weapons systems are a 'top priority', and that they might have to take "responsive measures on the ground, in the air and in outer space, the results of which would be unpredictable."<sup>29</sup> The US has equally made clear to the Chinese side its intention to proceed with the NMD and its unwillingness to see regression in Chinese behaviour on proliferation matters.<sup>30</sup>

The scope of Chinese concerns on the NMD/TMD issue is understood only in the context of how they see the world in the next decade. There is broad agreement in the Chinese strategic community that the Japan-US defence relationship, which includes but is also much broader than the TMD, is a primary instrument of US hegemonic policy, an "Asian edition of NATO".<sup>31</sup> Containment of China is regarded as a credible strategic US objective in the near to medium term. TMD is viewed as the tool to neutralise

China's capacity to counter this process and to delay even further its critical objective of reunifying Taiwan with the mainland. The Chinese are equally aware of its impact in terms of economic and political costs.

In this situation, Chinese objectives may be three-fold:

- (a) To prevent deployment of TMD in Taiwan by warning the US of extremely high political and strategic consequences of this action.
- (b) To delay ABM Treaty revisions through diplomatic action, including psychological pressure on US allies (including Canada and the EU) of the importance of avoiding a needless confrontation with China.
- (c) To commence preparations for development of an indigenous programme in case the actual deployment of TMD neutralises the current advantage of China's strategic nuclear forces.

It is likely that the Chinese will persist in their diplomatic efforts to convince the US that "before approving any expansion of ballistic missile defence programmes, including TMD and particularly NMD, Washington policy makers should focus more on the strategic and political cost effectiveness rather than technical and financial ones."<sup>32</sup> Chinese policy makers still seem to be divided on whether the US will move ahead with NMD/TMD.

In these circumstances, the Chinese could use a variety of tools to handle the situation.

- (a) Agree to resume the suspended dialogue on arms control and non-proliferation with the US, subject to NMD being placed high on the agenda. The dialogue has been suspended since the US bombing of the Chinese Embassy in Belgrade in May 1999.
- (b) Hold out the possibility of a 'compromise' on TMD by saying that some forms of it are legitimate for self-defence of US forces, in return for guarantees that it will not be deployed in the context of Taiwan. Some indication was given of this by

arms control negotiator Sha Zukang in a significant interview with *Xinhua News Agency* in November 1999 in which he said – "although China understands the value of TMD for protection of stationed troops, it opposes advanced TMD systems that could be used in national missile defence."<sup>33</sup>

(c) Rebuild a common non-proliferation agenda with the US by offering to strengthen existing treaties, including possible willingness to consider accession to regimes (like MTCR) that China has hitherto opposed. In an interview to *Beijing Review* in February 2000, Sha Zukang said that "efforts should be made to enhance international cooperation in the area of non-proliferation and to explore new solutions consistent with the new international situation on the basis of existing non-proliferation treaties."<sup>34</sup>

(d) Issue non-specific warnings about possible Chinese non-cooperation in case the US insists on deploying the NMD/TMD, as a pressure both on the US and on its allies.

The Chinese, it is clear for the present, do not wish to get into a debilitating arms race unless this is unavoidable. By the same token, it would be a misjudgement on the part of the US to assume that NMD represents a quantum leap which China cannot cope with in financial or technological terms. If China develops the firm perception that the United States is intent on freezing its strategic advantage permanently, Chinese national interests would set them on a collision course.

### Endnotes

1. *Ta Kung Pao*, 2 February 1999.
2. Press Statement by Acting US Under Secretary of State of Arms Control and International Security Affairs John Holum in Beijing on 26 March 1998.
3. *Hongkong Wen Wei Po*, 17 November 1998.
4. Kyodo News Agency report on 26 November 1998 as contained in *Summary of World Broadcasts* (SWB) of 28 November 1998 quoting remarks of Hu Xiaodi, DDG of Arms Control and Disarmament Division of the Chinese Foreign Ministry.

5. "Speech by Sha Zukang at the 7<sup>th</sup> Annual Carnegie International Non-proliferation conference on 11 January 1999," *Beijing Review* 8-14 February 1999.
6. *China Daily*, 27 January 1999 (article by Chen Yali).
7. *Ban Yue Tan* magazine article reported by *South China Morning Post*, 9 February 1999.
8. *South China Morning Post*, 19 November 1998.
9. *Financial Times*, 26 February 1999.
10. Transcript of Press Conference by US Secretary of State Madeleine Albright in Beijing on 2 March 1999.
11. *Financial Times*, 2 March 1999.
12. *Ta Kung Pao*, 2 March 1999.
13. Press Conference by Foreign Minister Tang Jiaxuan on 7 March 1999, *China Daily*, 8 March 1999.
14. *International Herald Tribune*, 25 March 1999 (story by Seth Faison of New York Times service).
15. Transcript of speech delivered by President Jiang Zemin of China at a special session of the Conference on Disarmament in Geneva on 26 March 1999, *China Daily*, 27 March 1999.
16. Interview to *The Globe & Mail* (Canada) by Premier Zhu Rongji of China as reported in *China Daily*, 8 April 1999.
17. *China Daily*, 6 May 1999.
18. *World Affairs*, No. 13, 1999 – interview by Sha Zukang.
19. Letter dated 28 April 1999 from PRs of Russia and China addressed to SG of CD transmitting JPC between following consultations in Moscow on 14 April 1999 – CD document CD/1584, 28 April 1999.

20. *People's Daily*, 27 August 1999.
21. *ITAR-TASS* (English service), 24 August 1999 (by Andrei Kirillov from Beijing).
22. *Xinhua News Agency*, 2 August 1999.
23. Press Briefing by State Department Spokesman James Rubin on 3 August 1999.
24. *Digest Magazine*, 22 October 1999 quoting *San Qin Du Bao*, 13 October 1999.
25. *Sing Tao Jih Pao* (Hongkong), 2 November 1999, as reported in *SWB* of 3 November 1999.
26. *China Daily*, 14 January 2000.
27. Transcript of press briefing by Walter Slocombe, US Under Secretary of Defence for Policy in Washington on 27 January 2000 after talks with General Xiong Guangkai.
28. *China Daily*, 23 February 2000.
29. Statement by Hu Xiaodi, China's Ambassador for Disarmament at the Plenary meeting of the Conference on Disarmament on 24 February 2000.
30. Transcript of press briefing by Walter Slocombe, US Under Secretary of Defence for Policy in Washington on 27 January 2000 after talks with General Xiong Guangkai.
31. Chen Yongcheng, "Why the US Reshapes the Two Military Alliances", *Foreign Affairs Journal*, No. 53, 1999.
32. Hu Yumin, "A Preliminary Survey of US Post Cold War Nonproliferation Policy", *Foreign Affairs Journal*, No. 51, March 1999.
33. Interview by Sha Zukang to *Xinhua News Agency*, 26 November 1999.
34. Interview by Sha Zukang to *Beijing Review*, 21 February 2000.

# Military Dimensions in the Future of the Indian Presence in Space

DR V SIDDHARTHA

Ever since the Cold War ended, the new patterns of geo-political, geo-strategic, geo-economic and geo-technological alignments in the world have manifested new assertions of race-based supremacy that were hitherto only implicit in North-on-South relations since the White colonising powers began their reluctant territorial withdrawal at the end of World War II. This trend towards a new hegemony can be characterised as establishment of the International Varna Order (IVO), which is representable thus:

@ Japanese, Koreans, Taiwanese	● Whites	~ One billion people; numbers starting to decline
	● Yellows@ .....	
	● Browns	~ Five billion people; numbers rising
	● Blacks	

The IVO has operational components, pithily stated by Samuel P Huntington in his 1993 article in *Foreign Affairs*:

Global political and security issues are effectively settled by a directorate of the United States, Britain and France; world economic issues by a directorate of the United States, Germany and Japan, all of which maintain extraordinarily close relations with each other... The West in effect is using international institutions, military power and economic resources to run the world in ways that will maintain Western predominance, protect Western economic interests and promote Western political and economic values.

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This article is an elaboration of the talk delivered at the United Service Institution of India on 23 February 2000.

*Journal of the United Service Institution of India*, Vol. CXXX, No. 540, April-June 2000

These operational components seek to pre-empt and counter the new threat thus (italicisation mine):

...And as the power of the West ebbs, "the rest" will become more and more assertive. *For the West to survive...it must...close ranks.* Its future depends on its unity. The people of the West must hang together, or they will hang separately.

But Huntington should not really worry; the triumph of the West has been very durable. The West has hung together very well; with assets, tools and goals arranged in a triad, which may be represented thus:

### Assets

*Social Assets* : Mass basic education; egalitarian vocational training for field competency; merit-based access to higher education with affirmative action for those in need; norm of gender equality enshrined in law.

*Economic Assets* : Protected domestic markets; man-made 'designer' materials and alternatives to energy sources to reduce dependency on resources under Brown-Black control.

*Technology Assets* : Science-based technology.

Hegemonistic foreign policies supporting:

- (a) Control over reserve currencies.
- (b) Prised-open foreign markets.
- (c) Extra-territorially enforced rights to intellectual property.
- (d) Maintaining un-interferable access to inexpensive raw materials and energy sources, particularly oil.
- (e) Military intervention, *in extremis.*

Nuclear  
Weapons

Maintaining  
hegemony.  
Shaping architec-  
ture of global power:  
Economic, Techno-  
logical, Military,  
Institutional, Affiliational.

### Goals

### Tools



The above triad manifests itself in many ways: maintaining and enlarging the gap between the West and the Rest are only two of these ways. In the words of Xerxes Sapur Desai, Vice Chairman and Managing Director of Titan Industries Ltd (April 1999):

After the cold war, the WTO has become a tool in the hands of industrial, military powers for imposing certain ways of doing things on the rest of the world. Tell me, if these policies were not advantageous to the US, would they be pursued? Very clearly not. Self-interest is emerging in the garb of developmental models and new economic ideologies.

And those of an official of the US Bureau of Export Administration in February 1999:

Maintaining military superiority means maintaining the gap in capabilities between ourselves and our adversaries, and that gap is maintained and *enlarged* both through policies that retard our adversaries' progress, such as export control, and through those that help us run faster – increased research, development and acquisition of advanced technologies here at home.

What the West calls 'export controls', and the Rest experiences as 'technology denial', have been through three epochs in which fear has been the common key.

### **Epochs of Technology Denial**

World War I to World War II. Fear of entanglement in others wars, and fear of domestic (US) food and material shortages dominate export controls (Trading With the Enemy Act, 1917; Neutrality Act, 1935).

World War II to the end of Cold War. Fear of communist 'expansion' caused Western allies and Japan to practice (variably) moderate to severe 'dual-use' technology denial on the former Soviet Union and Warsaw Pact countries. The Co-ordination Committee for multilateral export controls (COCOM) was formed in 1949 as a secret organisation.

End-of-Cold War and Beyond. Axis of West-towards-East technology-denial regimes has rotated 90 degrees towards South.

All-White North fears the economic and military rise of Brown-Black South. Full scope safeguards for nuclear technology; Missile Technology Control Regime (MTCR) for Missile/Space technology; 'dual-use' for other technology.

It is no coincidence that the membership of technology cartels and denial regimes is almost wholly White or White-controlled. These are :

(a) Nuclear Suppliers Group (Established: 1978)	32 + Argentina + Japan + Russia + South Africa
(b) Australia Group (Established: Mid-1985)	28 + Argentina + Japan + South Africa
(c) MTCR (Established: 1987)	29 + Argentina + Brazil + South Africa
(d) Wassenaar Arrangement (Established: 1996)	31 + Russia + Turkey

### India : The 'Instigator'

The formation and policies of these technology cartels and denial regimes have been identifiably triggered by Indian efforts and activities in the corresponding technological areas. Thus, in the space and missile area:

(a) Mid-to Late 1970's	'Space' profile evolved. Indo-Soviet, Indo-French and Indo-German collaborative arrangements.	Missile and 'space' item transfers placed on agenda of East-West conventional arms limitation talks of 1970's.
(b) July 1980	SLV-3 Launch	US Arms Control and Disarmament Agency (ACDA) Annual Report for 1980 summarises "dual-use

- |                     |  |  |
|---------------------|--|--|
|                     |  | missile technology proliferation problem".   |
| (c) April 1983      | RS-D2/SLV-3  | Mid-1983: Negotiations towards MTCR begin amongst G7.  |
| (d) Mid-1980's      | Integrated Guided Missile Development Programme (IGMDP) becomes public knowledge.  | MTCR negotiations speeded-up.  |
| (e) March 1987      | ASLV Launch  | April 1987: MTCR promulgated.  |
| (f) May 1989        | First 'Agni' launch  |  |
| (g) August 1990     | Kalam's 'Brahm Prakash' Memorial lecture reveals SLV-3 basis of Agni, Space-DRDO links and academia-industry networking. | November 1990: US enacts PL:101-510, "Missile Technology Controls" and promulgates the Enhanced Proliferation Control Initiative (EPCI). |
| (h) Feb-August 1991 | Prithvi 03-05 tests  | November 1991: MTCR revised.   |
| (j) August 1992     | Extended range (250 km) Prithvi test   | January 1993: Tightening of MTCR (Range-Payload trade-off).  |

#### The Nuclear Field:

- |              |  |  |
|--------------|--|--|
| (a) May 1974 | Pokhran  | September 1974: Select NPT-members committee promulgates Zangger 'Trigger' List.   |
| (b) 1975     | Heavywater Plants construction begun with imported equipment from France and West Germany. | 'London Club' formed to control nuclear-related exports and later expanded into Nuclear Suppliers Group (NSG) to include France and East Bloc countries. |
| (c) 1977     | Power Reactor Plutonium Recovery Plant (PREFRE) at Tarapur commissioned.                   | 1978: Nuclear technology export conditionalities made more stringent and IAEA safeguards requirement added.  |

(d) Late 1970's	Heavywater Plants start to come on stream.	1978: NSG adds heavy water production items to Zangger Trigger list.
(e) Through 1980's	Fuel reprocessing plant expanded at Tarapur, new one at Kalpakkam. Fast Breeder Test Reactor commissioned.	1990: Uranium reprocessing equipment added to expanded Zangger Trigger List. Japan and Germany require full-scope safeguards on nuclear exports.
(f) 1990-91	Indian Uranium enrichment capability reliably reported. Post-Soviet revival with Russia of negotiations on Kudankulam reactors.	1992: Nuclear-related 'dual-use' transfers restricted by NSG. 1993: NSG requires full-scope safeguards on all nuclear transfers.

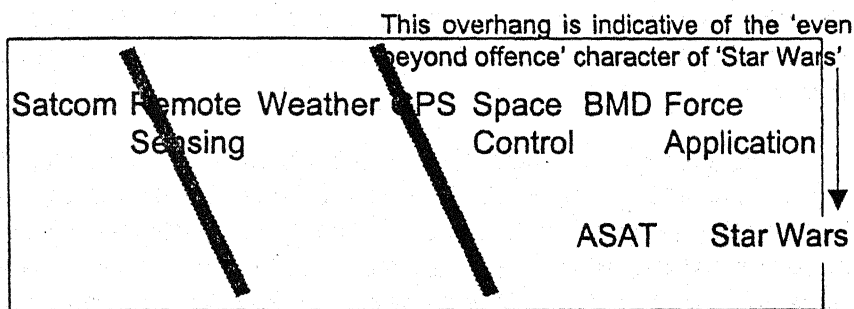
But members of denial regimes have got the net message from Pokhran-II and Agni-II that through technology denials India can at the most be delayed, but not stopped, from eventually 'catching up'. And, if India can overcome, will other Brown-Blacks be far behind? And for how long? Fearful of their own answers to these questions, the upper Varnas in the IVO covet exclusivity in their occupation of the hegemon's last remaining 'high-ground': Space. Thus:

- Military-nuclear status has been the *de facto* criterion for a place at the world's hegemonic governing top-table: namely, the P5 of the UN Security Council.
- Expanded permanent membership (P5 to P7/9) will be on combination nuclear-military-economic power criteria, *judged by the P5, led by the US*.
- Because other nuclear-missile-economic challengers are not far behind, India cannot hope to raise permanently its caste status in the IVO, merely by an emulatory process of

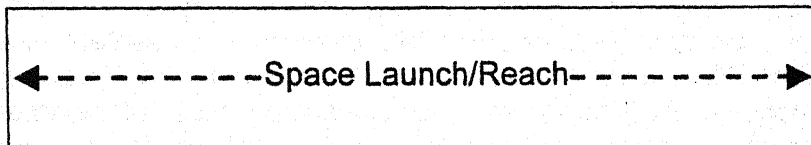
"technological sanskritisation".\*

- Therefore India has, willy-nilly, to co-occupy militarily the hegemon's last remaining 'High Ground' – *Space*, and establish an active (i.e. not merely reconnaissance) military presence there.

Investments to reach and use Space have yielded non-space spin-offs on ground. This is now a commonplace. What is much less evident is the spread-spectrum of spin-in military returns from investments in Space, as represented in the following diagram:



Commercial → Civil non-commercial → Dual-use → Defence → Offence →



**Source:** Modified and extended from: RAND PM-433-JS, May 1995  
(Reference 16)

### India's Presence in Space

The credit for India's current one-of-six presence in Space

\* 'Sanskritisation', as defined by the originator of the term and doyen of Indian sociologists – the late Prof MN Srinivas, is the process by which a low caste or tribe or other group takes over the customs, ritual, beliefs, ideology and style of life of a high and, in particular, a 'twice-born' (dwija) caste.

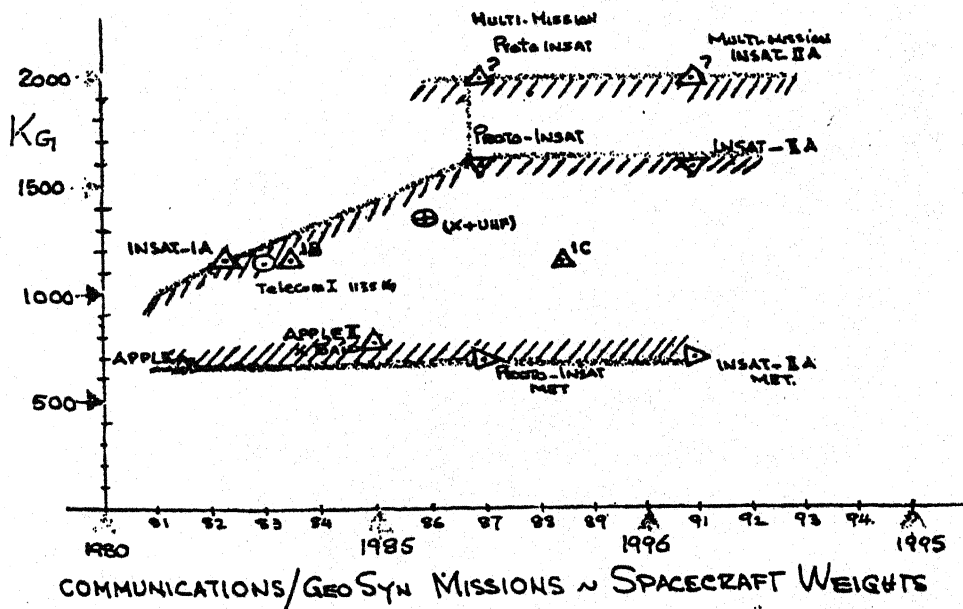
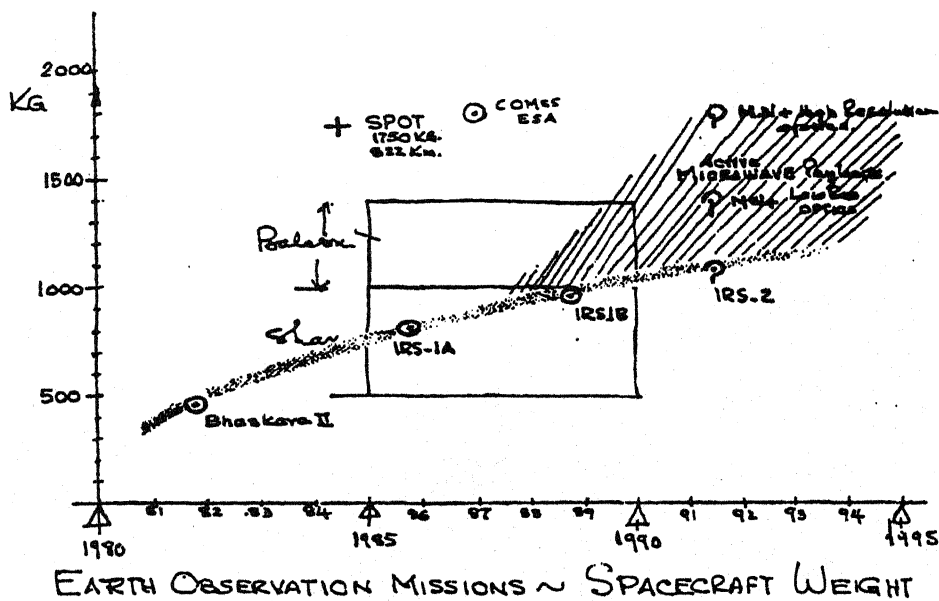
has often been mis-attributed to the 'vision' of Vikram Sarabhai. Actually it took his successor, Satish Dhawan, several years to bring the needed skills, systems-engineering discipline, patient attention to detail, and wide-ranging administrative reform into the institutions that Sarabhai left behind. It was only through this effort that Dhawan was able to bring his accumulated aeronautics design insight and engineering 'feel' to bear on the technological tasks – as distinct from mere 'visions' – that needed to be accomplished. It also took the extremely fine judgement of Brahm Prakash (brought in after his retirement from the Bhabha Atomic Research Centre (BARC) by Dhawan as Director of Vikram Sarabhai Space Centre in Thiruvananthapuram) to make choices for leadership in technology development from amongst the raw human material that Sarabhai had inducted.

The portfolio of assets that India today has in space-reach, space technology and space applications can be traced to the systematic execution of a nested hierarchy of systems-analysis-based master-plans.\* The parameters of these plans were encapsulated into the following two techno-scenario diagrams, drawn by Dhawan himself. (see next page)

Dhawan's other techno-scenario diagram is contained in a lecture he delivered to the Astronautical Society of India in 1996. A slightly modified version of this diagram is presented here. (NEWARS stands for National Early Warning And Response System – a wholly benign space-sensor and communications based integrated space-ground system meant exclusively for peaceful purposes). I have superposed on this diagram a scenario-line marked 'New Wars 2020: UNCLES'. Also superposed are military event-markers on the Dhawan line. Annotations to these superpositions and additions follows:

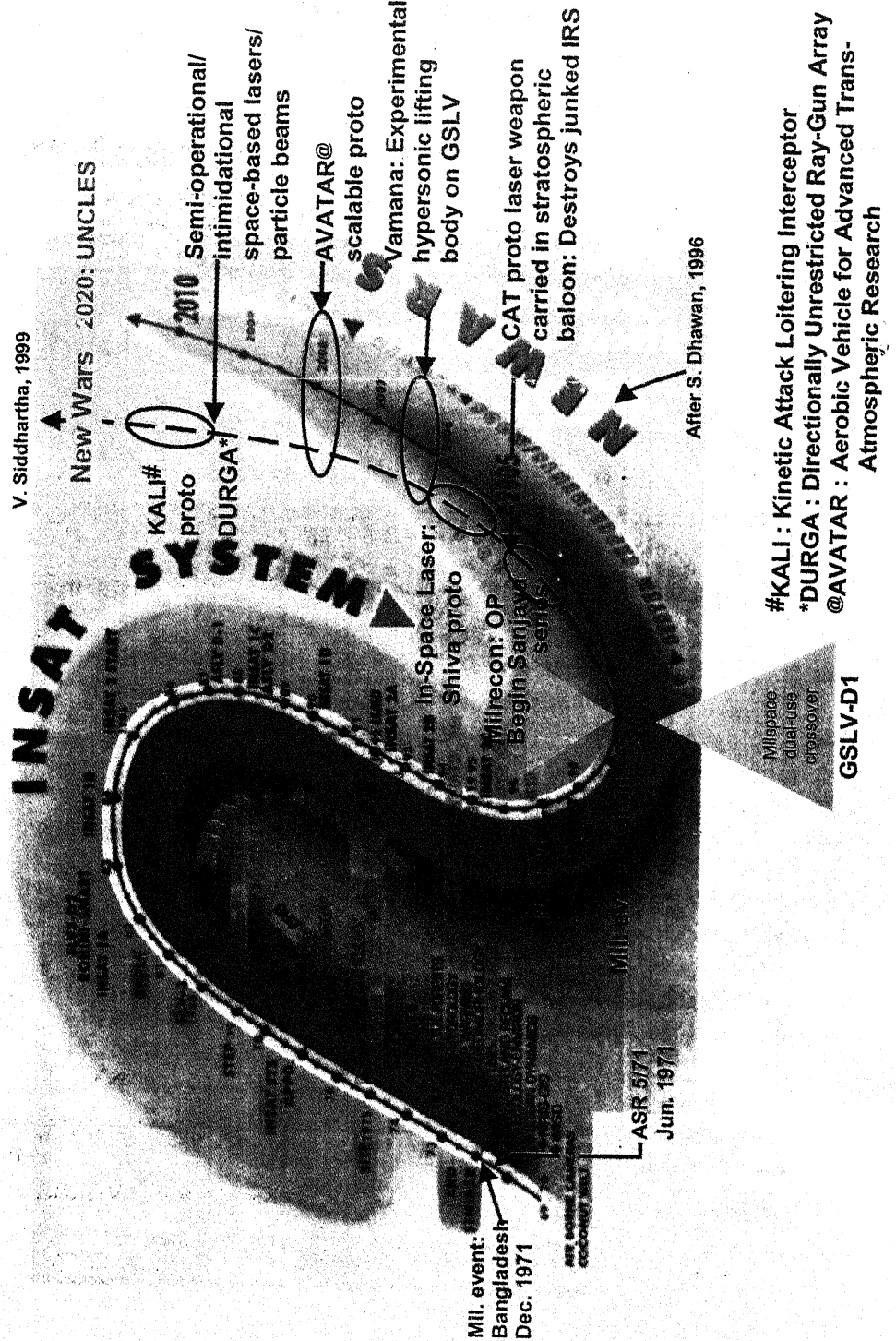
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\* The Dhawan definition of a 'master-plan' should be incorporated into management texts. A master-plan is not an 'outline plan' or an 'indicative plan' but a very detailed plan. However, after the detailing is done, certain parts of the plan are held to be inviolable and constitute the 'master' part of the plan. Only around this 'master' part are other originally-fixed details allowed to be changed, depending upon changing requirements.



Dhawan Diagrams, Cauvery Bhavan, 31 May 1982

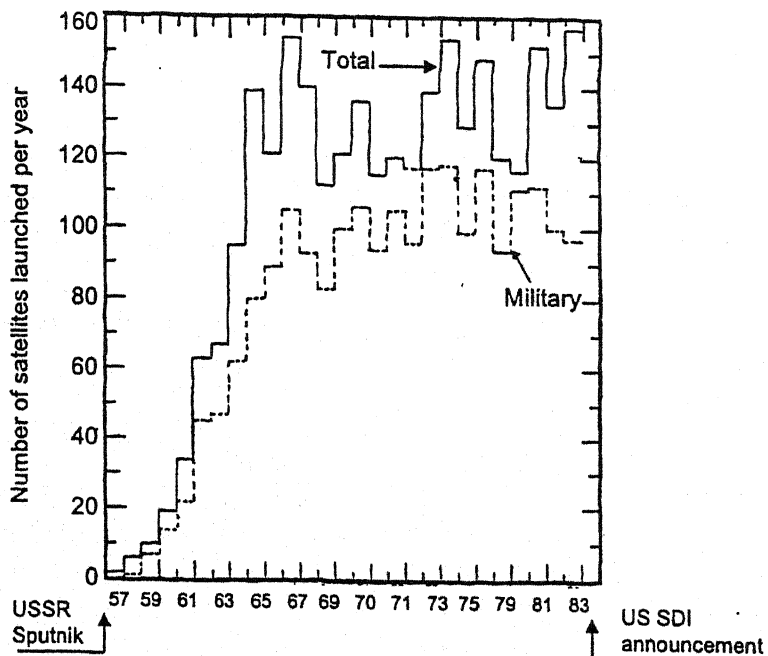
(Reference 12)





- ASR 5/71 of June 1971 is a remarkably prescient Air Staff Requirement issued by Air Headquarters six months before the Bangladesh War. It sets out the qualitative requirements of an Indian military reconnaissance satellite, at a time when only aircraft-based special colour film cameras were being tried-out by ISRO (Indian Space Research Organisation) for civil remote-sensing experiments.
- A much-heightened appreciation of the need for space-based military reconnaissance has come in the aftermath of Kargil (1999).
- The first developmental flight of ISRO's Geo-Stationary Launch Vehicle (GSLV D-1) will mark India's significant transition to acquiring an autonomous capability to lift into low-earth orbit heavy payloads of 'dual-use'. This transition is identified as the 'Milspace dual-use crossover.'
- On the 'New Wars' line, the *Sanjaya* series of operational military reconnaissance satellites is marked into a very realisable time-frame. However, as one traces the line upwards, the 'event times' marked on it stretch further out into 'just-about-do-able' and then into rather speculative end-of-decade events. Horizontal 'bubbles' signify dual-use capability for servicing both the scenarios on the 'New Wars' and 'Newars' lines.
- CAT is the Centre for Advanced Technology – the laser and particle accelerator laboratory in Indore of the Department of Atomic Energy.
- *Vamana* is a 'dual-use' experimental hypersonic lifting-body vehicle.
- The acronym AVATAR is owed to Air Commodore R Gopalswami (Retd), the former CMD of Bharat Dynamics.

Although the militarisation of Outer Space has been, till the mid-1980s, passive, it must not be forgotten that some two-thirds of all satellites launched into space since Sputnik have had either military or dual-use missions, as shown below.



Dependence of military forces on space assets has grown to the point where: 'All US military weapons above the level of rifle or automatic weapon rely on space to function effectively... Space is a key element of all modern weapons systems'. (Reference 10)

Such passive militarisation became active after the US Strategic Defence Initiative (SDI) sought space-denial and space-control. In his speech launching the SDI, President Ronald Reagan concluded that "tonight we're launching an effort which holds the promise of changing the course of human history." The "course of human history" was changed a decade later by the collapse of the Soviet Union, caused in part by its attempts to counter SDI *using its existing politico-economic-technological system*.

The first large-scale use for military operations of space-based assets was extensively tested and demonstrated during the Gulf War. Post Gulf War, the fashionable buzz-phrase in geo-military concepts is 'Revolution in Military Affairs (RMA)'. Unchangeably, what is 'buzz' amongst the two upper castes in the IVO becomes 'buzz' in our mimic-culture some years later. So, before the following phrase (which is not mine) becomes 'buzz', let me set it down:

### **Space Dominance: Next Century's Geo-military Doctrine**

- "...just as by the year 1500 it was apparent that the European experience of power would be its domination of the global seas, it does not take much to see that the American experience of power will rest on the domination of space... Just as Europe shaped the world for half a millennium...and expanded war and its power to the global oceans, the United States is expanding war and its power into space and to the planets." – George and Meredith Friedman, 1998.
- "With regard to space dominance, we have it, we like it, and we're going to keep it." – Keith Hall, US Assistant Secretary of the Air Force and Director, US National Reconnaissance Office, 1998.

It is not difficult to foresee that, just as the 'nuclear dominance' doctrine has been sanctified by the P5 in the UN Security Council, so too will the new doctrine of Space Dominance have a UN 'cover'; possibly a: United Nations Command for Law Enforcement in Space (UNCLES).

In its foresight for the creation and Indian use of space-based assets, ASR 5/71 was possibly too early. One can only hope that the following call by Air Chief Marshal S K Sareen on 8 October 1998 is not too late:

I have often emphasised that in the years ahead, the exploitation of space-based resources for the conduct of air operations will assume increasing importance. Success in future wars will depend on the ability to deploy space-based resources for tasks such as surveillance, battlefield management and communications. The necessity to progress from an 'Air Force' to an 'Air and Space Force' by deploying space-based systems, is growing in importance everyday.

## References

1. AAAS, "Space Weapons and Defense, Part II," in *Science and Security: The Future of Arms Control*, No. 86-16 (AAAS, Washington, DC, 1986).
2. Assembly of Western European Union, *A European Space-based Observation System: Colloquy, Official Record* (Office of the Clerk of the Assembly of WEU, San Agustin, Gran Canaria, 24-25 March 1995).
3. Lt Col Kenneth W Barker, USAF, *Airborne and Space-based Lasers: An Analysis of Technological and Operational Compatibility* (Occasional Paper No.9, Center for Strategy and Technology, Air War College, Air University, Maxwell Air Force Base, Alabama 36112, June 1999).
4. Angathevar Baskaran, *Technology Development in India's Space Programme 1965-1995: The Impact of the Missile Technology Control Regime* (Thesis submitted to the University of Sussex for the degree of Doctor of Philosophy, Science Policy Research Unit, University of Sussex, UK, April 1998).
5. Ashton B Carter, *Directed Energy Missile Defense in Space* (Congress of the United States, Office of Technology Assessment, OTA-BP-ISC-26, Washington, DC, April 1984).
6. Tom Clancy with General Chuck Horner (Retd), *Every Man a Tiger* (GP Putnam's Sons, New York, 1999).
7. Satish Dhawan, *Whither Space and Astronautics* (Lecture delivered at The Astronautical Society of India, Bangalore, 6 September 1996).
8. George and Meredith Friedman, *The Future of War: Power, Technology and American World Dominance in the 21<sup>st</sup> Century* (St Martin's Press, March 1998).
9. Fusion Energy Foundation, *The Strategic Defense Initiative: Its scientific, economic and strategic dimensions. Proceedings of the conference sponsored by the Fusion Energy Foundation and the Schiller Institute* (22-23 April 1986, Tokyo).
10. IANUS, Conference on *Space Use and Space Ethics: Criteria*

*for the Assessment of Future Space Projects* (organised by the Research Group Science, Technology and Security (IANUS) at the Darmstadt University of Technology, Germany, 3-5 March 1999).

11. Nandasiri Jasentuliyana, ed., *Maintaining Outer Space for Peaceful Uses: Proceedings of a Symposium held in The Hague, March 1984* (GLDB-1/UNUP-537, The United Nations University, Tokyo, 1984).
12. APJ Abdul Kalam and R Narasimha, eds., "Foreword", in *Developments in Fluid Mechanics and Space Technology* (Indian Academy of Sciences, Bangalore, 1988).
13. APJ Abdul Kalam, *Some Experiences from Aerospace Technology and Programme*, The Sixth Prof Brahm Prakash Memorial Lecture (The Indian Institute of Metals, Bangalore Chapter, 21 August 1990).
14. Air Marshal Bharat Kumar (Retd), *The Impact of Emerging Technologies on Air Power* (United Service Institution of India Paper 1/98, New Delhi, 1998).
15. Michael McGwire, *Perestroika and Soviet National Security* (The Brookings Institution, Washington, DC, 1991).
16. Scott Pace, *Economic Interests and Military Space Systems* (RAND PM-433-JS, May 1995).
17. RUSI, Conference on *The Military Use of Space*, organised by the Royal United Services Institute for Defence Studies (London, 22 September 1999).
18. Air Chief Marshal Satish Kumar Sareen, *CAS' Address at the Air Force Day Parade* (New Delhi, 8 October 1998).
19. The Scientific Staff of the Fusion Energy Foundation, *Beam Defense: An Alternative to Nuclear Destruction* (Aero Publishers, Inc, California, 1983).
20. Lawrence C Trost, *Ballistic Missile Control and Monitoring Options* (Arms Control Studies Department, Sandia National Laboratories, USA, July 1996). Available at <http://www.cmc.sandia.gov/issues/papers/trostA/index.html>.

21. United State Congress, Office of Technology Assessment, *Ballistic Missile Defense Technologies*, OTA-ISC-254 (US Government Printing Office, Washington, DC, September 1985). Available at <http://www.wws.princeton.edu/~ota/>.
22. Unites States General Accounting Office, *Ballistic Missile Defense: Evolution and Current Issues*, GAO/NSIAD-93-229 (Washington, July 1993). (Also search combination "NSIAD" and "Ballistic Missile Defense" at <http://www.gao.gov>).
23. United States, Ballistic Missile Defence Organization, <http://www.acq.osd.mil/bmdo/bmdolink/html/>.
24. United States Space Command, <http://www.peterson.af.mil/usspace/>.

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# Cyber Security in the Defence Services

Sqn Ldr A R Saluja

## INTRODUCTION

Information Technology (IT) is a part of everyone's life. If not today, tomorrow it would be hard to find even a single pair of hands among the Services, which would not have tapped the keys on a computer keyboard. The information technology revolution that has been sweeping the world in the last decade or so is only recently touching Indian lives. The Government of India has recognised the inevitability of the new era, which promises to change the way we live and interact. The high level National IT Task Force is all set to usher in the IT Revolution into Indian lives with a set of 108 recommendations that are designed to ensure that IT becomes a national movement. It seeks to revitalise the economy based on knowledge rather than on conventional raw materials and physical labour. This change is bringing with it a parallel revolution in the nature of warfare.

Today's information age has developed a large number of channels for information flow. Cellular telephones, personal computers, satellite-based communications, fax, multimedia and digital networks permitting exchange of large volumes of voice, data and graphic material. Millions of computer-based bulletin boards have sprung up linking people around the world in a continuing conversation about everything from sex to politics to terrorism. The world has been transformed into what is being called a 'global village'.

### Impact of IT in the Gulf War of 1991

The concept of application of information technology to warfare has been firmly established after the 1991 Persian Gulf War.<sup>1</sup> During this war information was used both to support the anti-Iraq coalition's

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*Journal of the United Service Institution of India, Vol. CXXX, No. 540, April-June, 2000*

operations as well as to blind the Iraqi forces to the extent that they became practically redundant in the physical battle. Virtually every aspect of the war was automated, requiring transmission of large quantities of data in different forms. A few examples are given below.

By the end of *Operation Desert Storm*, there were more than 3,000 computers in the war zone linked to numerous others in the US. Airborne Warning and Control Systems (AWACS) and Joint Surveillance and Targeting and Reconnaissance System (J STARS) were two powerful information weapons. AWACS - a Boeing 707 aircraft crammed with computers, communication equipment, radar and sensors scanned the skies for enemy aircraft or missiles and sent targeting data to interceptor aircraft ground units. J STARS, its counterpart, scanned the ground in order to help detect, disrupt and destroy the follow-on echelons of the enemy. Two J-STARS planes flew a total of 49 sorties, identified more than 1,000 targets, including convoys, tanks, trucks, armoured personnel carriers, and artillery pieces, and controlled 750 fighter planes. They were able to provide the commander a full picture of the enemy movements in real time as far away as 280 kms under all weather conditions.<sup>2</sup>

Thus, through technological advances in space and airborne platforms and satellite communications, commanders were literally "on scene" despite being hundreds or thousands of miles away. Something like virtual presence<sup>3</sup>. Satellite-based global positioning system and advances in Precision Guided Munitions allowed the Allies to attack well-defined targets with surgical accuracy. Real Time post-attack assessments were possible with the use of space-based systems and Remotely Piloted Vehicles (RPVs).

All this was possible because of a vast electronic infrastructure built up at high speed consisting of 118 mobile satellite communication stations, 12 commercial satellite terminals using 81 switches that made available 329 voice and 30 message circuits. Extremely complex linkages were established to tie different US-based databases and networks to those in the war zone. In all they handled upto 7,00,000 telephone calls, 1,52,000 messages per day and used 30,000 radio frequencies. The air war alone involved nearly



30 million telephone calls.<sup>4</sup> Without this nervous system, systematic integration of effort would have been impossible.

Anybody even remotely familiar with the functioning of communication systems, must wonder where our current level of communication capability in the Armed Forces compares with this. Let us look at IT applications from the Air Traffic Control angle as regards airspace management.

Thousands of sorties were routed at high speeds through<sup>5</sup>:-

- (a) 122 different air refuelling tracks.
- (b) 660 restricted operations zones.
- (c) 312 missile engagement zones.
- (d) 78 strike corridors.
- (e) 92 CAP points.
- (f) 36 training areas spread over 93,600 miles.

All this had to be co-ordinated with continually shifting civil air traffic corridors. This was possible only because of computers, databases and satellites and their systematic integration.

### **Impact of IT in the Indian Air Force**

One may argue that realities in limited war in our context may not involve such complexities. But the fact remains that the use of computers, data bases and satellites in command, control and communication functions can significantly boost efficiency in airspace management and greatly reduce the chances of fratricide. Already in the Armed Forces of most advanced nations, supply and maintenance functions are routinely conducted from computers on the flight line and logistical and personnel information is compiled and tracked on computer spreadsheets.

There are indications about the complete computerisation and networking of all accounting units in one Wide Area Network (WAN).

This WAN would make information regarding individual accounts more accessible. An accounts officer thus is on the threshold of acquiring another designation - that of the local system administrator of his end of the network. With this responsibility, he will not only need to tap keys on the computer key board, but also ensure that his node is safe and secure.

Already, the IAF has a project on the anvil to link up all the equipment depots and logistics sections of Wings on an Integrated Materials Management On Line System (IMMOLS) for on line inventory management and control. This will allow user wings to check the availability of spares at remote storage depots and initiate on line demands. Just imagine how much time, effort and paper work we would be saving. In this regard, it is noteworthy to mention that an Indian firm Tata Consultancy Services has been contracted for their services for the project. Patriotic fervour aside, it is important that we are not held hostage by foreign suppliers who may infest hidden glitches in the network infrastructure for use in times of crisis. Even the AFRO has an ambitious computerisation programme, which will allow the entry of occurrences at unit level for promulgation at the central level. The meteorological services of the IAF are already networked and are likely to get updates to the network in the future.

So, most sub-branches of the Indian Air Force - logistics, accounts, administration, meteorology, flying etc., will need to recognise this new dimension. What needs to be stressed here is that we must not look upon IT merely as a means of improving efficiency, but in fact see it as a tool of war to be used both offensively as well as defensively.

This dimension of Information Warfare is unique. Unlike the other four dimensions i.e., land, sea, air and space, this is a dimension which has a bearing on the conduct of all the four domains. While the other dimensions have a clear-cut domain with each being a battlefield on its own, the battlefield of Information Warfare knows no limits. All officers of the Armed Forces - commanders and leaders of tomorrow must recognise the challenges of this new domain and understand its implications. Only

then will the force be in a position to develop the strategy and tactics to use it offensively against adversaries and defend against the 'weapons' of Info War.

### SCOPE

**Basic Information Warfare Definitions.** In this a description of various terms like information systems, information function, information spectrum and information warfare will be given.

**Characterisation of IW.** This would include the various forms in which IW is being used, or is likely to be used in the future.

**Offensive Cyber Warfare.** Various measures that may be employed to affect the enemy IW functions.

**Defensive Cyber Warfare.** The basic steps required for safeguarding own information systems from hostile interference.

### INFORMATION WARFARE DEFINITIONS

**Information Functions.** The building blocks<sup>6</sup> of Information Warfare are the four basic functions, which involve:-

- (a) Collection of Information.
- (b) Information Filtering.
- (c) Information Analysis.
- (d) Dissemination of Processed Information.

**Information Systems.** The systems that are used to carry out the information functions are termed as information systems.

**Information Spectrum.** The entire gamut of information, information functions and information systems constitute the Information Spectrum.

**Information Warfare.** Actions taken within the information spectrum either to safeguard or exploit the spectrum of the adversary is Information Warfare. The paragraph devoted to Information Warfare

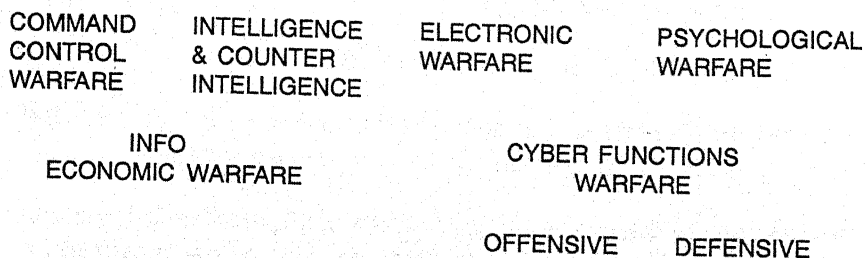
in IAP 2000, the Doctrine of the IAF, exhorts the IAF to pay special attention "... to defend against info war" and "... exploit the potential offered by info war to cripple an enemy". In the later part of the paper one may see how that may be done.

### CHARACTERISATION OF IW

Basically, IW already exists in various forms<sup>7</sup> though it may not be known by that typical name. For instance - when one conducts surveillance or reconnaissance one is collecting information; when one conducts radar jamming using Electronic Warfare (EW) systems, one is denying the enemy information about one's presence or activity; when one conducts psychological operations one is using information to influence the behaviour and character of people; and when one carries out precision bombing one is using precise targeting information in the form of hard intelligence. Even in these forms where it already exists, the revolution in computing power, speed of communications, integration of sophisticated air, land, sea and space-based sensors is greatly changing the technique and pace.

**Information Warfare Classification.** Let us see where these existing forms and that of Cyber Functions Systems warfare feature in the overall classification of Information Warfare.

#### INFORMATION WARFARE



The top four types of warfare i.e., Command and Control (C<sup>2</sup>) warfare, Intelligence-based warfare, EW, and Psy War relate to the exploitation of the information spectrum by various means and methods. These operations have formed key components of military

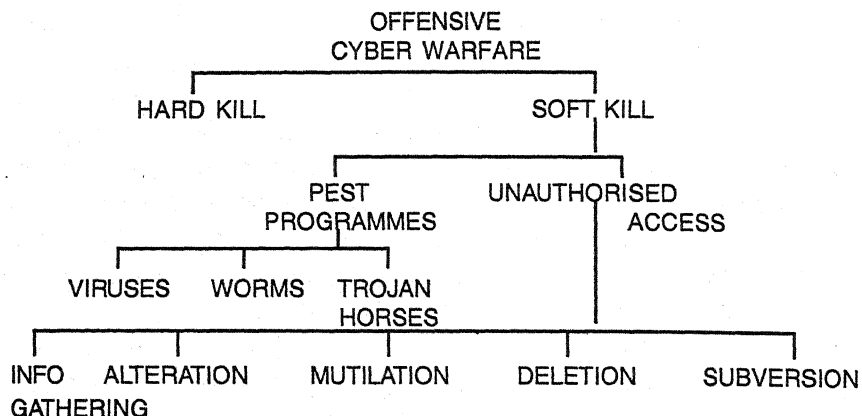
operations since long. The difference in employing these systems will come about because of the integrated network-centric approach, which would tend to bring them under the overall command and control warfare. In this, all these would be dovetailed to target the information flow of the adversary in order to influence his C<sup>2</sup> capabilities, while protecting friendly C<sup>2</sup> capabilities against enemy action. Using today's cutting edge technology, such a capability could offer the commander the potential to deliver a knockout punch before the outbreak of traditional hostilities.

Info economic warfare would primarily involve attacks at the civilian information infrastructure having a direct bearing on the economic potential of the country. In March 1998 the network of an Indian branch of a multinational bank was broken into by some hackers. Fortunately, the system administrators were able to identify it in time and the holes were fixed before any serious financial damage could be inflicted. If an amateur hacker could threaten such a network, imagine what damage a state-controlled and backed team of experts could inflict on say the on-line stock exchange or the RBI's data base.

Let us now have a look at the aspect relating to Cyber functions security and warfare. As we have discussed earlier, the dependence of nations on computers is only going to increase with time. We are ourselves in the middle of an IT Revolution in the Indian Armed Forces. This dependency, on the one hand, suggests a key vulnerability, while on the other hand it offers a unique opportunity. Quoting the IAF doctrine "Destroying or interdicting an enemy's economic and military infrastructure by computer intrusion (infowar) may be just as valid an approach to warfare in future as strategic bombing is today"<sup>8</sup>.

### **OFFENSIVE CYBER WARFARE (OCW)**

Offensive cyber warfare may be divided into hard kill or soft kill. Hard kill would involve the physical destruction or tampering of enemy's information systems like mainframes, servers, up-linking stations, communication nodes, etc.



**Soft Kill.** The soft kill option may be exercised by introducing pest programmes or by gaining unauthorised access, commonly referred to as hacking. This may be carried out against military forces that use computer networks or even stand-alone, non-networked computers.

**Pest Programmes.** These software programmes employ various techniques of inserting codes<sup>9</sup> that at a later time result in damaging effects. These may be of various types.

**Viruses.** These are computer programmes, which have the ability to attach themselves to legitimate files and then propagate from computer to computer as files or floppies are exchanged. These may result in damaging consequences like :-

- (a) File disappearance.
- (b) Reduction of disk space or memory.
- (c) Disruption of the system.
- (d) Slower programme loading, running or disk access.
- (e) Change in size of files.
- (f) Malicious display, etc.

Various kinds of virus antigens and computer vaccines are available; however, they may not be successful against all advanced viruses continually being developed.

**Worms.** These are software programmes; but unlike virus these can be executed remotely and are meant to spread in networked environments only. The worm can propagate itself at an exponential rate, thus slowing down internet sites and causing communications to come to a stand still. For example, in 1988 Robert Morris developed what came to be known as the Morris worm, which is known to have infected 6,000 internet sites before being detected.

**Trojan Horses.** Much like the Trojan horse of ancient times, this is a programme designed to do things that the user did not intend. It remains inactive and tricks the user into inadvertently activating it with a certain command (by pretending to perform some useful function). Once activated, it could result in :-

- (a) Disabling of hardware.
- (b) Capturing and stealing data.
- (c) Corruption of operating software.
- (d) Total destruction of the network or operating system.

The Trojan horses could be like a logic bomb, which is detonated by a predetermined logical happening or command. Or like a time bomb, which may be programmed to be activated at a certain fixed time. Or like a letter bomb in which the activation is done via electronic mail (E-mail).

**Unauthorised Access.** On 04 June 1998, an 18 year old had successfully broken into the servers of the Bhabha Atomic Research Centre and disabled two of their servers and mutilated their home page. Later, on 16 October 1998, the Indian Government admitted that "our adversaries" had managed to gain access to the Indian Army's web site *armyInKashmir.org* and changed the parameters in such a way that any visitor to the site was diverted to another site that had subversive material posted on it.<sup>10</sup> These two separate incidents implore us to wake up and ensure the

security of our computer infrastructure and its contents. Let us see what are the vulnerabilities that go hand in hand with connectivity. Interconnected communications and computer systems are susceptible to intrusion. Once a system has been compromised, the intruder may do any of the following, depending on the intent of the intruder and the extent of access that he has secured :-

- (a) Information gathering.
- (b) Alteration.
- (c) Mutilation.
- (d) Deletion.
- (e) Subversion.

In order to plan security measures against hackers, one must be aware of how the hackers gain access. Hackers are skilled computer users who are driven to learn more with or without malicious intent<sup>11</sup>; in fact, those with malicious intent are often called crackers. The hackers usually break into a system by exploiting the weakness of the network operating system. Often, it is the carelessness of the system administrator that facilitates access to a network. Hackers have a set of tools, basically software programmes, which are available freely on the Internet. The community of hackers called hackerdom exchanges vital information regarding tools and tricks of the trade on the Internet. The processes involved in gaining unauthorised access could be :-

- (a) **Initial Access.** The hackers scan the target system for open ports, which may be exploited. Open ports are programmes within an operating system that permit exchange of files, e-mail etc., between computers or networks.
- (b) **Login Options.** They then look for certain user-defined or system-enabled login options like 'guest' or administrator'.
- (c) **Password Access.** Through the login or open port, they access password files and run password-cracking programmes to obtain user login passwords.



(d) **Root Access.** Once in the system, they obtain root access i.e., access to the operating system - the very heart of a computer - which gives them total control over the functioning of the system. Once in total control they may delete, modify, subvert, mutilate, steal information or use the system to hack into other systems leaving no trace of their identity.

### DEFENSIVE CYBER WARFARE

Post Pokhran II, our nuclear programme hinges on extensive computer simulation and a viable command and control infrastructure with built-in redundancy.<sup>12</sup> Both these would need elaborate data management and decision support systems with reliable communications. Besides these, the other areas where the information infrastructure would be critical would be gathering, processing and dissemination of intelligence for national security purposes, Defence R&D set up, as well as command and control set ups of the Armed Forces. Since we are still in the process of building up the requisite infrastructures, it is imperative that we incorporate the maximum safeguards or protections in the blueprints itself. It has been reported in *Defence News* that China has an aggressive info warfare programme fuelled by advice and support from American security experts.

Though not extensively wired, Pakistan has taken a cue from the United States and is doing much work on info war. Maj Gen Yashwant Deva, in an article in the *Indian Defence Review*, says that he has reason to believe that in Pakistan cybercrime and hacking get covert official patronage in the same way as drug trafficking and illicit arms running. It is noteworthy that one of the most notorious and prolific viruses called Brain Virus was authored by two Pakistanis from Lahore, Basit and Amjad, way back in 1986.

**Defensive Cyber Warfare Measures.** Let us see what are the various measures that may be incorporated for protection and security of information and info systems.<sup>13</sup>

(a) **Authentication.** This verifies information and identity about the person trying to access the network. This implies use of a valid login and password.

(b) **Access Control.** Once a genuine user is authenticated, the system decides what this particular user can do on the network. Eg., a user belonging to guest group will not have the right to make changes, while one who belongs to administration may be allowed to.

(c) **Data Integrity.** This prevents the modification of particular files while on the network or in transit by unauthorised users. This is vulnerable to viruses.

(d) **Data Confidentiality.** Essentially, this works like the security we give to documents and files in service. Eg., only Wg Cdr and above may be able to read contents of top secret files.

(e) **Defence against Denial of Service Attacks.** This is possible by using software that recognises a query or attempt, which may overload the system or crash the network and prevent the system from crashing. In September this year, the US Department of Defence set up a cyber ambush that automatically shut down the Internet Browser of a large number of computer hackers who were intending to shut down the server by overloading it with a large volume of requests. In fact, the hackers have strongly alleged that the Pentagon has used illegal offensive techniques to thwart the attackers' attempt.

## RECOMMENDATIONS

These are the basic ways in which security may be compromised and the corresponding measures to provide the basic protection. Besides these, there are a number of recommendations, which may help to secure the organisation's info assets. These are :-

**Set a thief to catch a thief.** Hire a hacker to serve as a security advisor to secure your system.

**Update the software regularly.** Most manufacturers continue to improve upon and fill holes detected in software. These are advertised as patches on manufacturer's website.

**Stay abreast of the latest.** Information of security holes, bugs in the operating systems and software is available on dedicated security related websites like [www.cesr.org](http://www.cesr.org) and [www.nt.security.net](http://www.nt.security.net).

**Offer as few access points as possible.** This may be done by disabling unnecessary file transfer protocols or default administrators access points.

**Password policy.** Follow a policy that forces the users to regularly change passwords and select passwords with alphanumeric combinations or mixed case passwords, which are relatively difficult to crack.

**Encryption.** This is a method for protecting computers against unauthorised access in which all data that is exchanged is encrypted by the sender and the same has to be decrypted by the user.

**Indigenous systems.** In buying hardware and software and contracting after sales service from foreign vendors and MNCs, we run the risk of being held hostage at a later date by them to glitches or snags, which they may introduce in the system without our knowledge. These may be logic or time bombs, designed to corrupt the system or shut it down or be controlled at their will.

Finally, one must realise that there is no such thing as a 100 per cent secure system. Even the leaders in the field of IT, the Americans, admit that "We keep building better and better defences and the bad guys keep building better and better offence". By continuing to do so, you are basically going to raise the cost factor and the amount of resources required for launching offensive attacks more and more.

## ADVANCES IN INFORMATION WARFARE

The United States is the most advanced country as far as using information in war is concerned. The levels of info warfare-related technology that the US possesses may at the moment seem

unattainable by a developing country with a low level of computerisation. However, some of the capabilities that the US possesses can serve as pointers to the direction the military application of IT is taking.

**Network Centric Warfare Approach.** This approach being adopted by the US Navy refers to a battle strategy based on information dominance, rather than platform firepower. Under the Navy's concept, naval assets from ship to shore would be connected by high speed data links, enabling commanders to make snap decisions based on more information about the battlefield. The weapon system under such a system is the battle force and not a platform any more. All the systems have to 'talk together and link together and pass information at high speeds'. This has thrown up the acute requirement of sailors and officers skilled in the area of info operations, including individuals capable of maintaining networks and troubleshooting.<sup>14</sup> *Defence News* (2-8 November 1998) reported that the first aircraft carrier IT-21 battle group, based on *USS Enterprise* and her accompanying flotilla of cruisers and destroyers, has been deployed on an experimental basis. The same aircraft carrier was used to launch the latest volley of Tomahawk cruise missiles at Iraq in late December 1998.

**Ultra Secure Network for Defence, Industry and Government.** The US defence research agency DARPA has developed an Extranet for security professionals (ESP) - a system that allows security professionals in DoD, industry and US Government to share information through highly secure e-mail, databases, bulletin boards, web pages and chat rooms. The network uses top of the line 128 bit encryption to protect computer conversations. Encryption is the process of protecting information against unauthorised access, and 128 bit encryption is estimated by computer experts to take 'longer than the life time of universe' to crack.<sup>15</sup>

**US Army Bolsters Web Site Protection.** The US Army in September 1998 ordered all service websites shut down to allow system administrators to remove sensitive information

and install additional protection like passwords or reverse Domain Name Server hook-up and transmission control protocol wraps. Their info assurance experts were to scrutinise the information that would be made available to the public.<sup>16</sup>

**International Implications of Cyber Attacks on US Navy Systems.** Some of the attacks on US Navy computer networks are believed to have originated in two countries outside the US and were used for running reconnaissance missions on networks and then for gaining access to information. The Navy was caught off guard and has admitted the need for some forensic tools they didn't know they needed till they were faced with attacks they had not seen before.<sup>17</sup> Do we need to wait for such attacks to take place before we put all necessary safeguards in place?

**Offensive Cyber Intrusions and Countermeasures.** Despite various elaborate security measures, hackers were successful in breaking into USAF computers 43 times in 1998 alone.<sup>18</sup> A hacker group supporting Mexican Zapatista rebels attacked the Pentagon server to protest the US supplying Mexico with sophisticated computer-based communication technology and weaponry. They used an applet called Floodnet to set up participants' computers to dial and redial the Defence department's server with queries. The Pentagon got prior information about the attack and fought back with an applet of its own, which was activated whenever Floodnet was directed to the Pentagon's network. This software application was programmed to shut down the targeted computer browsers being used by the attacker's computer system.<sup>19</sup>

## CONCLUSION

Having seen the basic components of offensive and defensive cyber warfare and how it is likely to transform the way our Armed Forces are going to fight a war in future, there is an urgent need to prepare for this info age war and formulate a detailed doctrine. The recently constituted National Security Council is the ideally suited agency to provide the desired direction that the National Infor-

mation Infrastructure should take. Today, our country is still in the process of getting wired in the real sense. This gives us a unique opportunity in two vital ways. Due to low level of computerisation, we are less vulnerable than developed countries whose dependency on information systems is more. We could concentrate therefore on building up an offensive strategy in order to exploit this low level of computerisation to our advantage. Secondly, we ought to learn from mistakes that all along have been committed and resolved by the developed nations in their process of revolutionising and setting up of network centric infrastructure. A detailed study of the various manuals and reports on new methods of warfare and vulnerabilities of systems that a large number of countries have undertaken would go a long way in identifying the Key Action Areas.

Having studied various aspects of offensive and defensive warfare, we must incorporate these into the blueprint of the secure and reliable information infrastructure we set up for our country. In this regard, there is an urgent need to build cohesiveness into the three Armed Services and the various Paramilitary organisations. As of now, the Revolution in Military Affairs that is sweeping the three Services is in a compartmentalised piecemeal manner. Adequate emphasis and prioritisation in allocation of funds to the key building blocks of an automated battlefield has not been done. In fact, the lack of focus on IT systems is evident from the Defence Budget of 1998, which continues to concentrate on procurement of weapon systems for the three Services but without mention of any funds whatsoever for secure info infrastructure. However, a flicker of hope can be seen in a recent Navy document called "Strategic Defence Review: The Maritime Dimension", which puts a lot of stress on IT. It further suggests devising a national strategy to enhance survivability of information networks against hard and soft kill measures. It also calls for building up a legal system that standardises safeguards and promotes the application of IT.

While these individual Service efforts are laudable, unless we go in for a 'system of systems' to unify the fighting forces under one information umbrella, we will have a large number of IT systems that may not even be able to talk to each other. The realisation of a countrywide military information infrastructure and command and control net is an inescapable necessity. This net would

need to have all necessary protection and security measures installed to ensure reliability, safety and redundancy. The time to put these measures and checks in place is now and not after the net has been established and compromised.

## NOTES

1. Ajay Singh "Developing An Information Warfare Strategy", *Indian Defence Review*, July 1998, p.37.
2. Alvin and Heidi Toffler, *War and Anti-War*, p.87.
3. Gen John G Losber, (USAF), *USI Journal*, April-June 1996, p.152.
4. Note 2, p.100.
5. Ibid, p.99.
6. Note 1.
7. Ibid.
8. *The Doctrine of the IAF*.
9. Maj Gen Yashwant Deva, AVSM (Retd), "Threats to Cyber Security in the Wake of Pokhran II", *Indian Defence Review*, July 1998, pp.47-53.
10. *Indian Express*, 16 October 1998.
11. "On the Hacker Trail", *The Chip Magazine*, September 1997, pp.142-146.
12. Note 9.
13. "Checkmating Hackers", *The Chip Magazine*, September 1998, pp. 148-152.
14. Joe Capriano, Dy Commander for Warfare Systems at Arlington, VA, US Naval Sea System Command, quoted in the *Defence News*, October 1998 by Robert Hoizer.
15. George I Seffers in *Defence News*, September 1998.
16. *Defence News*, October 1998.
17. Ibid.
18. Col James Massaro, Cdr of Air Forces's Info Warfare Centre, Kelly AF Base, Texas, USA. Quoted by George I Seffers in *Defence News*, November 1998.
19. Ibid.

## The Development of NATO Nuclear Doctrine

SIR MICHAEL QUINLAN

NATO came into existence in 1949 because of worries about the power and the behaviour of the Soviet Union. Throughout the Cold War these worries were the essential focus of NATO military planning, including nuclear planning. The central military facts were that the Soviet Union had enormous conventional forces, substantial resources of chemical weapons and, as time went on, an increasingly extensive and varied nuclear armoury; the Soviet bloc boundaries were hard up against those of NATO, and at one point – Berlin – they surrounded and isolated an important Western enclave, and there were large Soviet forces deployed quite near those boundaries, deployed moreover in potentially attacking configurations, with massive holdings of tanks.

NATO decided quite quickly, in the early 1950s, that it would not attempt to match in Europe the size of the Soviet non-nuclear forces – there was no chance that democratic electorates, still preoccupied with post-war reconstruction, would tolerate the huge increases in defence budgets that would have been needed. It followed inescapably that if we were to have an acceptable military balance – so as to be confident that the Soviet Union had no easy military options for aggression or coercion – nuclear weapons would have to come into the picture.

In the early days NATO, through the United States, had a great lead in nuclear forces, and so NATO collectively did not have to think very hard about the doctrinal problems they might pose. But as the Soviets built up their own large arsenal NATO had to face up to new issues. I am simplifying the story somewhat, but in essence the earlier strategy for nuclear forces had been based upon what the jargon called "massive retaliation" – that is, the idea

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Excerpts of the talk delivered at the United Service Institution of India, New Delhi on 16 February 2000.

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*Journal of the United Service Institution of India*, Vol. CXXX, No. 540, April-June 2000



that any major Soviet aggression would be met pretty rapidly by a big nuclear strike. But this did not look quite so straightforward a concept when there was the evident possibility of suffering a similar strike in response. The approach of broad nuclear parity between East and West also highlighted a further problem; and this was the fact that though the Soviet non-nuclear predominance mostly threatened the European members of NATO, the Alliance's nuclear capability, aside from the relatively small British capability, rested in the hands not of these members but of the United States, which was on the far side of the Atlantic. Would it be credible, people wondered, that the United States would risk provoking nuclear retaliation against itself just in order to help its European friends?

NATO nuclear planning from then on was always having to tackle these two issues – the implications of East-West parity, and the problem of asymmetry within the Alliance. During the 1960s political concern about these two problems, and about the interaction between them, became very acute, and various approaches to solving them were debated and discarded. The key elements that emerged – the ideas that were left standing when debate had knocked the others down – were the strategic concept of flexible response, and the setting up of the Nuclear Planning Group.

The strategy of flexible response was formally adopted in 1967, and still in substance holds the field in NATO today. It has often been misunderstood, and sometimes deliberately misrepresented by opponents; but the basic concept is quite simple. It consists of saying, first, that we will not allow aggression to succeed; second, that we will do whatever is the minimum militarily necessary to prevent it from succeeding; third, that because we are a wide alliance and aggression against us could arise in a wide variety of shapes and circumstances, we will equip ourselves with a range of options for the form that our minimum necessary force might take; and fourth, that the choice among the options will be our choice – we will not let the aggressor determine that choice; we will not necessarily limit our resistance to the particular form which his aggression has taken.

I mentioned misrepresentations of this strategic concept. Let me point briefly to two of them. First, it is not the case, as some

critics used to suggest, that it meant that NATO intended its resistance necessarily to proceed step by step up some sort of pre-determined ladder of escalation. NATO could, depending on the concrete situation, go to a low step, or straight to a high step – whatever it judged necessary. Two, people sometimes talk of NATO having a policy of first use of nuclear weapons. I shall come back later to this question of first use; but at this stage let me just note that all the flexible response concept did was to refuse to rule out the possibility of first use. That is a quite different matter from having a *policy* of first use.

It was naturally important, for the implementation of the flexible response concept, that there should be a good range of options available – that there should be no huge gaps in the spectrum which an aggressor might exploit. In the nuclear segment of the spectrum, that underlined the need to have something intermediate between conventional forces and the ultimate strategic capability – it would simply not be credible that NATO would respond to, say, the seizure of West Berlin by annihilating Moscow, given that the Soviet Union had the ability to annihilate New York. So there had to be provision for more limited use of nuclear force. But the flexible response concept did not in itself tell us exactly what that limited use should be. And that is where the work of the Nuclear Planning Group came in.

The Nuclear Planning Group – the NPG – was set up in the late 1960s primarily as a way of helping to deal with the second basic problem I mentioned – the problem of nuclear imbalance within the Alliance. It sought – in the end surprisingly successfully – to ease worries about that imbalance by involving the non-nuclear members alongside the nuclear ones in a regular and systematic process, at various levels up to and including Ministers and bringing in military folk, defence civilians, scientists and diplomats, of consultation about nuclear issues and of co-operation in the development of shared doctrine about the possible use of nuclear weapons. The NPG was not the only way in which the non-nuclear countries were brought in; there was also an extensive programme of participation by them in the forces themselves, through a concept – the "dual-key" concept – whereby the Americans provided the nuclear warheads and continued to own and control them, but

other countries paid for and operated the delivery systems, whether aircraft or missiles. But for my purpose now – the development of doctrine – the NPG is the piece that matters.

The NPG dealt with a lot of aspects – the rules and methods for consultation and decision within the Alliance in crisis situations, for instance, and various aspects of weapon security and safety. But a central element was the development and refinement of concepts for nuclear use – above all, concepts for nuclear use in Europe in scenarios where things were going badly for NATO at the conventional or chemical level but the conflict had not reached the stage of the final all-out strategic exchange. (The NPG never attempted to go deeply into that exchange; it was left as essentially a matter for the United States.)

NATO's actual nuclear capability was at this time in a rather strange posture. It had a vast and diverse array of nuclear weapons below the intercontinental level; by the end of Robert McNamara's time as Secretary of Defence there were about 7,300 US nuclear weapons in or around Europe. There were at one time or another weapons of varying yield to be delivered by aircraft or ground-to-ground missiles; there were air-to-air and surface-to-air nuclear missiles; there were nuclear land-mines; there was nuclear artillery; there were anti-submarine depth-charges and torpedoes; there had even been, briefly, a man-portable infantry weapon, a sort of nuclear bazooka, called "Davy Crockett" – once described to me as the only weapon in history with a killing radius longer than its range. This remarkable armoury (which at least in terms of numbers came to have its full counterpart on the Warsaw Pact side) had not been built up as the result of any deliberate NATO policy, and a lot of its components had been conceived at a time when nuclear explosive power was seen as a necessary way of compensating for inaccuracy of delivery; many of them were phased out anyway as technology became more and more capable of precision guidance. But there remained massive numbers. They had been amassed without any very precise doctrine beyond that of achieving victory on the battlefield by the application of enormous force. Many people had been uneasy with this essentially traditional notion for some years; and the contribution of the NPG was to get a coherent collective grip on the question of doctrine for use.

The crucial element of that contribution was to grasp firm hold of a fundamental truth. The process of discussion in the NPG, and the work it commissioned like operational research and careful war-gaming, led to a deepening and shared recognition that if there were substantial nuclear forces available on both sides the use of nuclear weapons by one of them could not be a dependable way of substituting victory for impending defeat at some lower level. The operational research showed clearly that, aside from a few very specialised scenarios, if a side that was losing at the conventional level used nuclear weapons and the winning side responded with similar nuclear use, then though there might have to be a brief pause the winning side could still thereafter continue to win militarily, perhaps indeed even more decisively.

Did that conclusion – the conclusion, in effect, that nuclear weapons could not be reliable war-winning instruments – mean that NATO's hopes for a flexible response strategy were in ruins? A few people, including a few professional military people, thought so. The NPG however was sure that these people were wrong. What the conclusion did mean was that conflict involving nuclear weapons had to be looked at and understood in a way fundamentally different from classical military evaluation. The underlying reality which the NPG work brought home even to those who had not previously grasped it is that the nuclear discovery puts in the hands of advanced states, whether actually or potentially, what is effectively infinite force; and you cannot rationally have an all-out contest of strength between infinite strengths. The inference which NATO rightly drew was that any use of nuclear weapons – short of the ultimate holocaust – could rationally be directed only at terminating a conflict, not at winning it. The aggressor, unless he was completely insane, could have embarked on his attack only upon a judgment that NATO would accept defeat rather than exploit its nuclear armoury; and the aim of any limited nuclear use must therefore be to convince him that this judgment was mistaken, and that for his own ultimate survival – which in face of nuclear weapons is always potentially at stake – he must back off. This, as the NPG realised, was in some respects an uncomfortable concept, since it dealt not in measurable physical facts but in psychology and political decisions – it entailed

persuading an aggressor to stop even though he still had the material ability to go on. Escalation, though never a certainty – people too often tended to talk as though it were like a chain-reaction in physics or chemistry, whereas it is in reality shorthand for a series of choices by human beings – was nevertheless always a possibility. But the hard fact – applying indeed to any armed conflict between substantial nuclear powers, not just in the European setting – is that no other concept is rationally available.

The NPG came to recognise this basic truth – that NATO nuclear use in Europe would have to seek to end conflict, not to prevail in it militarily in, say, the 1945 sense – quite early in its life. But of course there are all sorts of logically subsidiary yet practically important questions that follow; and the NPG developed what it called Political Guidelines for the Use of Nuclear Weapons to identify and tease out these questions.

It is worth noting that the development of these guidelines was a genuinely common endeavour – there was real collective interchange and learning. The activity was far from just a matter of listening to the United States – indeed, the first major draft of the guidelines was jointly worked up by the UK and West Germany, though naturally there was constant consultation with the United States.

The guidelines for the most part did not attempt to arrive at precise answers to all the specific questions that were identified; they were in practice more like a careful check-list of factors that would need to be remembered and weighed in all the particular circumstance of a given crisis. There was for example the question of target selection: what kinds of target should be hit? There was even some discussion of a "no-target" option – the demonstration of a nuclear weapon over the Baltic Sea, perhaps, or on unpopulated territory; but though that was never formally ruled out the general view, which I strongly shared, was that this would be a pretty useless way of trying to demonstrate determination to resist whatever the cost. That illustrates indeed a more general point: that there is an unavoidable tension between doing too little to convince the enemy that you mean business, and doing so much – either in numbers, for example, or in the nature or location of the targets struck – that you provoke a huge counter-strike in anger

or revenge. There can be no neat or universal way of identifying the right mid-point, and not surprisingly European and Transatlantic views about it tended to have different emphases – I remember being closely involved in one high-level NATO war-game exercise (these exercises were always played very seriously) in which the NATO military commander asked for a deep nuclear strike and British aircraft were notionally assigned to it because the Americans declined. The NPG did however agree that the targets would usually have to be, in at least a broad sense, military ones, both for ethical reasons and because the most effective way of putting over the message was thought to be to do something that hit the aggressor's capability for military action even though we could not hope entirely to remove it – the idea of "enforcing a pause" was sometimes expressed.

Other aspects that the NPG identified and examined included the need to think about fall-out and residual radiation, and about collateral damage – that is incidental harm to civilians which was not the direct intention of the strike. As you may imagine, there were some divergences of perception within the Alliance about this, depending on who were the civilians who might be affected. And the work also recognised that it might be unwise to plan to hit targets that might reduce the enemy's ability to keep his own nuclear forces under proper control, or take considered political decisions to call off the aggression.

One particularly important facet of the work was communication – not just within the Alliance and up and down the NATO military chain but also, and perhaps just as crucial, with the presumed enemy. It was clearly essential both to do anything possible in advance, for deterrence, to leave him in no doubt what NATO could not accept and would resist with all necessary force; and then, if NATO did decide that nuclear weapons had to be used in a limited way, to ensure that the adversary understood that it was limited and not the initial salvo of the full-scale strategic onslaught.

I want to say something about the impact of the NPG on the size and shape of NATO's nuclear forces; about the effect which arms control sometimes had; and about the particular question of first use and no first use. But just before I address those three

topics, a brief word about the final strategic level, and about what was happening in US and UK policy related to that.

In virtually all the work I have been talking about, the NPG was concerned with the nuclear forces that were declared to NATO, mostly based in Europe, and with the possible use of these forces at stages of conflict before the final strategic exchange. There were formal plans for the use of the declared forces within that exchange; but that always seemed to me pretty theoretical given the vast size of the main US strategic armoury, and as I indicated earlier the NPG scarcely addressed it. The US used regularly to brief NPG Ministers about strategic nuclear issues, but usually as a matter for information rather than for deep consultation. I note however that roughly in parallel with the NPG work the US was progressively refining its own doctrine in partly similar ways; in particular, from about the mid-1970s onwards they developed what were initially called LNOs – Limited Nuclear Options – for using relatively small proportions of their strategic force in order to help terminate conflict short of the ultimate level. And in addition their targeting, though it still contemplated, at the ultimate level, mind-blowing numbers of strikes, became more sensitive, for both political and moral reasons, to the idea of getting away from counter-population strikes.

British nuclear planning, though of course on a vastly smaller scale, followed a comparable path. All our forces were and are declared to NATO, and NATO use of them would be governed by the doctrines I have been talking about. We did however retain a last-resort power and right of using them by our own decision independently of NATO and of the US in ultimate crisis; indeed, the power to act independently – providing a second centre of decision, as the jargon had it – was the essential point of having them at all, for there was plainly no need for them purely as a numerical addition to the colossal US arsenal. We did have concepts of our own for an ultimate level of strike, and though in my opinion we were slower than we ought to have been we did develop planning for more limited strike options below that level. That is still our position, though our weapon holding is now greatly reduced and we maintain only one type of delivery system, the Trident Submarine Launched Ballistic Missile (SLBM).

But let me return to the NATO theme. I referred a moment ago to the impact of the NPG on the size and shape of NATO nuclear forces. The work had made pretty clear, even if anyone had been in much doubt before, that an inventory of 7,300 US nuclear weapons in Europe was far more than any rational purpose could require. The work also brought out that any weapons which by their nature would have to be used, if at all, pretty early on in a conflict – before the enemy tanks rolled over them – made little useful contribution. Conclusions like these played an important part in enabling NATO, as time went on, to make successive reductions – in the aggregate, very large reductions – in the size of its nuclear forces.

Reductions of this kind were in principle very useful for arms control. But the interaction between doctrine and arms control sometimes had odd effects. Two examples. First, at one stage it was decided, in the light of the doctrine, that a thousand warheads were surplus and could be withdrawn; and they were therefore offered up as part of a possible arms control deal. But negotiations on the deal got stuck for other reasons; and because the thousand warheads were on the table as a bargaining chip NATO was inhibited from getting rid of them as fast as it would have liked.

My second example concerns the negotiation on intermediate-range nuclear forces – INF – in the early 1980s; and it prompts me to bring out another basic truth that flows from the work on doctrine. What that work showed, expressed in a different way, was that nuclear forces do not exist to fight other nuclear forces. If we simply want enough numbers and types to be sure of having a sensible range of options available for limited use as a way of getting across to the adversary the fact that we are not going to give in, in strategic logic it does not matter whether the other side has the same number in these categories, or twice as many, or ten times as many. But as a practical political matter bilateral arms control deals almost always have to operate in like-for-like terms – a common currency, as it were – as we have seen the SALT and START bargains. Yet because NATO's political and strategic circumstances, and therefore its deterrent strategy, were not the same as the Warsaw Pact's, the class of weapon system given up in the 1987 INF Treaty had quite different significance – greater



significance I would argue – for our strategy as compared with that of the Warsaw Pact. The Cold War was by then already fading, and I do not doubt the positive general political impact of the Treaty; but in strict strategic logic the bargain was not ideal.

I undertook to say something about no first use (NFU). As I hope I succeeded in explaining earlier, it would be a direct misuse of words to say, as some commentators have, that NATO had or has a policy of first use. NATO has a strong preference for no first use, and for no use at all, if that proves possible; and I think there can be a very powerful belief that circumstances in which first use might have to be considered are now of very remote likelihood. But preferences and expectations on these lines are a quite different matter from a formal, unqualified, permanent promise. NFU undertakings used to be a regular element in the Soviet propaganda set of proposals; and NATO then regularly rejected them, as parties perceiving themselves to be weaker at the non-nuclear level almost always naturally will. The strategic situation is now in some degree reversed, and Russia has very firmly withdrawn its NFU proposal. But despite the changed circumstances NATO has not changed its refusal, and it was reaffirmed as recently as the Washington summit meeting last April. I agree with the refusal. Let me explain why.

There is absolutely no way of making a promise of NFU dependable – no way of making weapons incapable of first use. Recall that a promise differs from an expectation, however confident; it is an undertaking to act, or not act, in a certain way regardless of whether it is found convenient to do so when the situation actually arises. But no country is going to seriously contemplate the use of nuclear weapons – which will be a very terrible decision for anyone to face – unless it is confronted by a desperate situation in which every other possible option seems more terrible still. The notion that a country in a situation of this appalling character will let itself be forced into some even worse choice just because it gave a promise long ago, in the calm of peace, to forego this option seems to me close to ridiculous. Suppose that Israel had given a NFU promise; if you were a hostile country weighing up the prospects of all-out aggression against it, would you feel confident about relying on the promise? Consider an even more concrete case.

Iraq in 1990 was a party to the NPT, and not in alliance with a nuclear power. It was therefore in theory protected by the general Negative Security Assurance (NSA) given in 1978 by the US and others, which amounts to a NFU promise. But when the US warned Iraq in very solemn terms against using chemical or biological weapons, though nuclear weapons were not explicitly mentioned Iraq almost certainly understood the warning in that way; and the United States almost certainly meant them to. No one, so far as I know, pointed to or invoked the NSA. To put the matter starkly, I believe that NFU *promises* can be no more than peacetime political theatre. They cannot change the reality of what would be fearfully difficult and stressful situations; if they have any security effect at all meanwhile, it can only be in the direction of marginally diluting the war-preventing effect of nuclear weapons in deterrence; and in ultimate security matters I do not believe in political theatre.

Let me finish by bringing the general matter of NATO nuclear doctrine up to date. There is really not much more to report. Since the fall of the Berlin Wall and the break-up of the Soviet Union, NATO has made various statements about its strategic concepts for the post-Cold-War world. There has been little said, and little need to say much, about nuclear weapons. They are a far less high-profile part of the NATO security scene than they used to be, and NATO has for the most part limited itself to stressing their reduced salience and their relevance only as a last resort in unlikely circumstances. But all this is simply conveying that use is now a remote hypothesis; it does not change the doctrine that would apply if, contrary to all expectation, use ever has to be considered. Despite the powerful minds that were always, from NATO's outset, brought to bear on the issues, it took us all a pretty long time – something like twenty years after the foundation – and a great deal of collective work to arrive at an agreed, coherent and realistic doctrine. But I think that in the end we did get there, and that it remains substantially valid.

# Understanding Infantry

LT GEN H B KALA

Infantry for long has been acknowledged as the queen of the battle. Versatile and flexible, it is the most dependable resource at the disposal of a commander. It is the sword arm of the Army.

Unfortunately, very few have a true understanding of most profound and finer aspects of infantry, rendering it susceptible to over-use and misuse. Without meaning to be overly patronising, infantry is not just another arm. It is unique in many ways and differs from other arms – particularly armour and artillery – in fundamentals. The lack of understanding of the distinctive features of infantry has often led to defeats and disaster.

The basic major difference between infantry and other arms is that while in the latter a tank man or a gunner is – for the most part – an instrument or an agent handling a complex delivery system, in infantry the rifleman is the deliverer himself. Put simply, a tank or a gun is more important than its crew (not that the crew is not important). On the other hand, an infantryman is more important than the rifle or LMG he wields. The *raison d'être* for the crew is the tank or the gun; in infantry the man is the *raison d'être* himself. So if you lose a gun or a tank, the crew loses its relevance. In infantry the opposite is true: once the man is lost, his weapon has no value. The difference does not end here; it runs deeper. The loss of a tank or a gun means the loss of an inanimate object; the loss of a man means the loss of an irreplaceable human life. The genius of a good commander lies in using infantry not only judiciously but also sparingly through manoeuvre and imaginative planning. If it is "more you use, less you lose" for armour, it should be "less you lose, more you use" for infantry.

Like other arms, infantry also has finite capacity to make war, but with a difference. It deals with humans; other arms mostly with machines. In other words, the residual combat potential of the

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*Journal of the United Service Institution of India*, Vol. CXXX, No. 540, April-June 2000

latter during or after an engagement is invariably dependent on the available number of tanks or guns, while in the case of infantry, it is calculated on the basis of surviving men. This also is only partially true. Unlike machines, human behaviour does not follow any precise, predictable trend. It is susceptible to the effects of the environment in which each individual and each group responds to a situation differently. Even this response may undergo a change with the passage of time. This explains why the same unit or sub-unit can alternatively achieve superhuman feats even under the most difficult conditions or wilt under the slightest pressure. In the Bangladesh War of 1971, a battalion remained near paralysed for three days after it had lost ten men to enemy shelling on the day of its arrival in battle. A week later, after it had been adequately baptised, the loss of thrice that number in a successful operation only spurred the men to seek more engagements with the enemy.

But as the duration of privation prolongs and casualties mount, even the best of units begin to lose cohesion and morale. At this point of time, mathematical head count becomes irrelevant and ultimately the unit no more remains operationally effective, at least for the time being. It is, however, difficult to lay down any precise, universally applicable thumb rule to determine the point which will signal the collapse of a unit. Since human spirit cannot be fathomed by any scientific means, infantry's behaviour will always remain an enigma to the students of human psychology. There are units which succumb to pressure easily and there are units which will fight to "the last round and the last man". In many cases a small band of men or even one single individual has been able to perform stupendous acts of valour and endurance, changing the very course of battle – one single LMG holding the advance of a battalion-sized column or one rifle section capturing a difficult feature.

We would have liked to say the same thing about other arms also. But unfortunately their performance is linked with their weapon system. A troop or a squadron can accomplish little if its tanks have been lost to enemy fire, and the men in a battery can only wait and watch if they have run out of ammunition.

No battle can be won without close integration of all arms and

services. Yet, paradoxically, in a battlefield littered with lethal, state-of-the-art weapon systems, infantry must find itself all alone at the time of final reckoning. As the two sides come within 200 yards of each other, all fire from guns, tanks and air must cease. From this moment onwards the infantryman has no one else to look for succour except his comrades and his personal grit and courage. No matter how long this close duel lasts, the issue must be decided by infantry alone. This is the ultimate test of infantry in which, irrespective of the final outcome, many infantrymen on either side must make the supreme sacrifice. Infantry, therefore, needs highly motivated and closely-knit men of raw courage and iron will, backed by strong leadership.

Earlier, it was said that infantry is the most dependable component of the Army. This point needs further elaboration. Battlefield circumstances may, at times, severely restrict or even preclude participation of one or the other arm – for no fault of theirs – in some specific operations. Even in an ideal tank country, armour may be compelled to temporarily opt out of a battle due to heavy bog, unexpectedly dense minefields or an unnegotiable obstacle; artillery may not be able to engage targets due to range limitations or lack of ammunition; and engineers may realise that the bridging equipment does not conform to the requirements of the obstacle. Weather conditions may further deplete the combat effectiveness of all these arms. But infantry knows or is expected to know no such impediments. It can never complain and is required to perform even when left all alone in the battlefield under adverse terrain and weather conditions, and without legitimate support from other arms.

The word flexibility has often been misunderstood in the context of infantry. Admittedly, infantry possesses unmatched flexibility at strategic and operational levels. Give a battalion 30-odd vehicles and two hours, and it will be ready to move anywhere within or outside the theatre in full combat readiness. The inter-and intra-theatre move of other arms, particularly armour is a time-consuming process involving detailed staff work and different modes of transportation. With the increase in distance, movement time increases exponentially. In a short duration war, it may, therefore, not be easy to effect a lateral shift in the disposition of armour

within or outside the theatre. In any case, it will continue to operate mostly in a familiar battlefield milieu and its role, irrespective of location, will remain identical. Infantry, on the other hand, with each new move may find itself in a totally new and strange environment and, worse still, may be asked to carry out tasks for which it is neither trained nor mentally prepared.

The situation reverses in tactical mode. Armour and artillery derive tactical flexibility – one of their major strengths on the battlefield – from their inherent mobility and range. Infantry, once committed to ground, cannot switch midway from one task to another without paying a penalty in terms of time, resources and casualties.

Versatility is another attribute of infantry. It is the only all-weather, all-terrain arm. Be it an offensive in a mechanised environment, defence at glacial, Himalayan heights or counter-insurgency operations in disturbed areas – it can adapt to the changed role easily. However, it needs mental and physical conditioning, specialised weapons and equipment and reorientation training before undertaking any new kind of task. Ignoring these basic prerequisites may result in failure of the mission and heavy loss to infantry.

Infantry thus has many exclusive virtues. It also has many vulnerabilities. Only a balanced view can be a true indicator of its potential on the battlefield. How often has this axiom been ignored by commanders in bleak situations? No other arm has been as misused or overused in war as infantry. Its dependability, flexibility and versatility – and above all unbounded capacity of human spirit – make the commanders instinctively turn towards it in extreme, grave situations. They expect miracles from it, and more often than not, it lives upto their expectations. Infantry, thus, has the unique capability to turn defeat into victory. Other arms also have it. But they do it through fire power and manoeuvre, infantry through human endeavour. This is what made Asal Uttar, Dograi and Haji Pir possible.

There are, however, occasions when disaster strikes even

before infantry can take a breather, let alone settle down in the new, alien environment. The commanders and staff who plan such operations get away with little or no blame, while infantry has to live with a permanent stigma. In 1962, a battalion was lifted from Pune and dumped at Chusul without any cold-weather clothing and acclimatisation. More recently, during Operation 'Pawan', scores of formations and units found themselves overnight in an unknown and hostile environment. What followed was a long saga of frustrations and non-successes. At the end of this painful experience, the commanders who had conceived and initiated this ill-advised excursion nearly managed to pass as strategic visionaries, while a large number of field commanders found their careers prematurely extinguished. All of them were infantry.

The infantryman is, therefore, something very special. Behind his very unassuming and modest facade is a man of steel nerves, raw courage and dogged resolution. He is selfless, ready to sacrifice himself for a cause or for his comrades. He is steadfast and dependable, and can readily adapt himself to a new environment. Contrary to popular perception, he is extremely accomplished and skilled, capable of effectively handling a variety of weapons and equipment. He combines his basic virtues with the skills of a gunner, sapper and a signalman.

If the individual infantryman comes closest to the definition of a complete soldier, it is the regimental ethos and spirit, esprit de corps, an unswerving commitment to the organisation and good leadership that bind the infantrymen together. The resultant synergy is the real strength of a unit or a sub-unit, wherein the total effect is many times greater than the sum total of individual contributions. Regimental spirit indeed is the very essence of infantry, which motivates the men to rally behind their regimental flag and, if occasion demands, make the supreme sacrifice for its cause. Nothing is more sacrosanct and dearer to an infantryman than the 'Izzat' of his battalion, not even his own life.

The message is obvious. Infantry will seldom fail a commander if used with discretion and sound professional judgement. You can stretch infantry but the limit is not infinite. Give it time and space

to adjust, provide it the necessary wherewithal, and give it the best leaders. It will achieve the desired goals, whatever the cost. Remember, it is men – and not machines – who make infantry. Treat their lives with respect and consideration. Do not flog them; infantry is not the panacea of every battlefield ill including commanders' ineptitude.

As for fellow infantrymen, walk tall. You are amongst the best the Army has to offer.

(This article was written before Operation 'Vijay'. The author's observations on other arms should not be taken amiss. He holds them in great esteem and considers them a major battle-winning factor).

### Errata

USI Journal Vol CXXX No 539, January-March 2000 Issue  
Article titled "Intelligence and Decision Making"  
By Lt Col M N Gopakumar

On page 48, paragraph two, the word vegetative should be corrected as cognitive; and on page 49, paragraph two, the word involve should be corrected as evolve



# Nuances of Insurgency

BRIG P S MANN, SM

## Introduction

**T**he first, the supreme, the most far reaching act of judgement that statesmen and commanders have to make is to establish the kind of war on which they are embarking; neither mistaking it for or trying to turn it into something which is alien to its nature. This is the first of all strategic questions and the most comprehensive" – said Clausewitz. This analysis is important for commanders to decide on the kind of tactics and strategy they are required to adopt to deal with the operational situation. During the Vietnam War, the Viet Minh leaders had often quoted an old axiom, "When the tactics are wrong and the strategy is also wrong, the war will be quickly lost". This was the reason for the French defeat in the First Vietnam War (1946-54). "When the tactics are right and the strategy is wrong, battles may be won but the war will be lost". This was the reason for the American defeat in the Second Vietnam War (1965-1971). "When the tactics are wrong and the strategy is right, the battles will be lost but the war will be won". "When the tactics are right and the strategy is also right, the war will be won quickly". This is what the Britishers had achieved during the Malayan Campaign (1948-57). In this article, I have made an attempt to explain the key aspects of insurgency to enable commanders to clearly comprehend the nature of this conflict, which will help them to adopt its rules to their value system while engaged in Counter Insurgency (CI) operations.

## Political War

Insurgency is waged to gain political control within the State; therefore it is a political war and its solution ought to be a political one for a permanent settlement of the dispute. There is a misconception that given a free hand, military means alone can

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*Journal of the United Service Institution of India*, Vol. CXXX, No. 540, April-June 2000

settle insurgency. While military effort is essential to contain the armed threat of the insurgents, 'Nation Building and Pacification' measures ought to be undertaken concurrently as part of an integrated approach to assuage the feelings of the local population and to mobilise their support. Military effort is, in essence, an adjunct to 'Nation Building and Pacification'.

In the beginning of 1965, the United States Army entered Vietnam as advisors to the South Vietnamese Army. By December 1965 their strength had increased to 3,85,000 American service men. General Westmoreland, the US Commander in Vietnam, adopted the strategy of "Attrition" through 'Search and Destroy Missions', ignoring the other two aspects. The Americans suffered 50,000 dead and 1,50,000 wounded in the Vietnam War and had to finally abandon it in 1971. General Giap had once remarked on the American leadership of that time, that "they cannot get into their heads, that the Vietnam War has to be understood in terms of the strategy of a peoples' war, that it is not a question of men and material, that these things are irrelevant to the problem."

The Soviet Army too suffered the same fate in Afghanistan (1979-1989) because of its efforts to force a resolution on an internal conflict through military might and communist ideology. This is a classic example of lack of perception of the nature of the conflict and character of the Afghan tribal society. After 11 years of struggle, the Russians suffered a severe defeat at a cost of 13,833 killed, 34,473 wounded and material and equipment damage worth US \$ 22 billion. Military commanders must make a very clear distinction between 'Conflict Management' and 'Conflict Resolution'. Armed Forces can play an important part by resolutely managing the conflict and creating an environment where the militants and government can initiate dialogue towards an amicable resolution of the conflict.

### **A Total War**

Insurgency is a total war in which the militants apply every facet of power at their disposal, including military, political, diplomatic, economic, demographic and psychological. It must therefore be

understood that a war has to be fought on all these fronts to be able to successfully counter the threat and for an early return of peace and stability. In the Indian context, insurgency has manifested in the North East (Nagaland, Manipur, Assam and Tripura) and the state of Jammu and Kashmir. In the North East, the Indian states share a common and porous international border with Bangladesh, Bhutan, China and Myanmar. For over four decades, insurgent groups have operated from safe sanctuaries from across the border with or without the connivance of neighbouring countries. On the other hand, due to our historic animosity with Pakistan, Islamabad has been openly indulging in proxy war in Jammu and Kashmir. To fight successful counter insurgency operations in these states, a definite, concerted and long-term, political and diplomatic policy needs to be evolved to isolate the militants and defeat the nefarious designs of our adversaries.

The people of the North East and Jammu and Kashmir feel alienated either due to historical, geographical or demographic reasons. Due to various factors, these states have remained backward both in terms of development and economic stability. Loss of identity of the ethnic population as a result of 'demographic invasion' from neighbouring countries or due to political and demographic imbalances that exist in these trouble torn states, needs the particular attention of the Government. This issue has gained emotional proportions amongst aboriginal people, particularly in Assam and Manipur. If this trend is allowed to persist, it will have serious repercussions on peace and stability in the region. This aspect is being exploited by the militants to achieve their political objectives. Genuine grievances of the people must be fully shared as part of our national strategy to bring peace and stability in these regions and should not be allowed to get obscured in the 'fog and dust' of the militancy.

### **Insurgency Stresses Ambiguity**

In this war, words, concepts and certain deliberate actions are undertaken by the militants to confuse the Security Forces (SF), to alter its perception of reality and thus lead them into faulty counter measures. In this context, proposals like temporary cease-fire by

militant groups need to be understood with caution and care. The Liberation Tigers of Tamil Eelam (LTTE) in Sri Lanka have repeatedly broken such commitments and have returned to the battle with more vigour and strength. Similar views are also being expressed about NSCN (IM) in light of the current cease-fire in Nagaland. Even at the tactical and operational levels we need to be careful of such activities lest we fall into a well laid out trap. 'Roar in the East and strike in the West' is part of guerrilla tactics. Frequent changes in tactics and *modus operandi* are deliberate actions aimed to stress ambiguity.

### A Protracted War

It is a protracted war, which aims to erode an opponent's will to persist by presenting a grim picture of an endless war, one without measurable goals and with no prospect of success. No other nation in the world can appreciate this aspect as much as India. It may be recalled that the Indian Army was employed in Nagaland for CI operations way back in 1956-57. Despite the present cease-fire by NSCN (IM), the insurgency in Nagaland is far from over. This menace has now spread to Assam, Manipur and Tripura.

Self preservation is equally important to fight this protracted war, which can be achieved through realistic training and meticulous planning and execution of operations. A fine balance has to be struck between self preservation and systematic annihilation of the militants. Unlike conventional warfare, which is time bound, counter insurgency operations are protracted in nature. Therefore, there is a requirement, at each level, to exercise a deliberate pause in operations with a view to provide rest and relief to troops and, more importantly, to understand the lessons from mistakes committed by us in operations.

The notion of 'Body Counts' as a quantifiable measure of success or performance of a unit or formation are often misleading and tend to blur our vision from ground realities. Worse, it generates unhealthy practices and lack of honest reporting, which in the long run not only tarnishes the image of the Army, but invariably detracts

our attention from the core issues. Commanders will do well if they also give credit to the units and formations for overall stability, participation by civil population in development work, and efficient functioning of civil administration in their areas of responsibility.

### **Changing War**

Insurgency is a changing war from its initial organisational related activities to terrorism to insurgency, culminating in a conventional or a mobile warfare. Insurgents may also carry out one or even two stages of this war simultaneously where it pays dividends. For example, terrorism and insurgency is practised currently in the North East as well as in Jammu and Kashmir. It is very important for commanders at the operational level to clearly comprehend the stage at which the insurgents are waging this war, in order to apply appropriate tactics to deal with the operational situation.

As per Mao's philosophy on Peoples' Revolutionary Warfare, conventional and mobile warfare is necessary to militarily defeat the SF and to finally take over the political control of the state. In such an eventuality the struggle takes the shape of Peoples' War or a Revolutionary War and the so called 'Peoples Army' would require major organisational and structural changes, which are only possible with external help and mass population support. Low morale of the SF and their poor performance in operations will certainly encourage the militants to switch over to conventional warfare.

### **Fight Against Own People**

Unlike conventional warfare, insurgency is fought against own people and in full public view, which makes it extremely sensitive and difficult particularly in a democratic set up. Our constitutional obligations and principles of democracy, to some extent, restrict the freedom of action of the Armed Forces while engaged in CI operations. Freedom of the press and electronic media, human rights organisations and judicial activism have made the task of SF all the more complex and difficult. Troops need to be educated about these constraints. At the same time, under the provisions

contained in the Armed Forces (Special Powers) Act 1958, the Armed Forces (Special Powers) Ordinance 1942, Arms Act 1959, Indian Explosives Act 1908, National Security Act and Unlawful Activities (Prevention) Act 1967, the Constitution provides ample authority and legal protection to the soldiers to accomplish their mission in a Low Intensity Conflict.

In a CI environment, the main players are the people, insurgents and the SF. Winning the 'hearts and minds' of the people is the single most important factor towards a final settlement of the conflict. There are no victors or vanquished in this war. It is the people who win or lose. The golden rule to win their 'hearts and minds' is by 'helping people, defending people and respecting people'.

### **Conclusion**

"War is a matter of vital importance to the state ... It is mandatory that it be thoroughly studied", said Santzu. Counter Insurgency is characterised by its complex nature leading to ambiguity. Insurgency is invariably protracted in nature and therefore requires clear comprehension of its nuances to enable commanders and statesmen to evolve a pragmatic and dynamic long term policy viz., political, economic, diplomatic, demographic and military, towards finding an amicable resolution to the conflict. Lack of clear perception of the nature of the conflict will inevitably lead to further complications, which can be highly detrimental to the sovereignty of a nation.

### **USI TIE**

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# Insurgencies in the North East

## PART II

LT GEN V K NAYAR, PVSM, SM (RETD)

### EXTERNAL ENVIRONMENT AND ETHNIC SPONSORSHIP OF INSURGENCIES

**C**onflict is a dynamic phenomenon and factors constituting and affecting it and their interaction make the totality of the conflict environment. Review and appraisal of insurgencies discussed so far have highlighted their internal dynamics. But the overall picture will not be complete without the influence of the external environment and recent trends of ethnic sponsorship of insurgencies.

#### Foreign Linkages and the External Factor

The North East shares borders with China, Myanmar and Bangladesh. Given the topographical and demographic configuration astride these borders, the region is prone to exploitation by hostile foreign powers. This is especially true of Pakistan, which has treated the North East as the second front for its proxy war against India. The North East being land-locked, its access to adjoining areas, particularly to Bangladesh, is vital because of the natural and traditional communications and economic interaction. The same is true for the insurgents for acquisition of arms and ammunition and support infrastructure of bases and training areas. With the thaw in Sino-Indian relations and China's likely access to the Bay of Bengal through Myanmar, Beijing's interest in the North East will be limited. But causing India trouble in the region will continue to be a viable low cost option, which we can ill-afford to ignore.

To understand the North East's foreign linkages, one has to go back to the historic background particularly of the colonial and post-colonial period and examine the insurgent linkages. In this the

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*Journal of the United Service Institution of India*, Vol. CXXX, No. 540, April-June 2000

work done by Subir Bhaumik is invaluable for its authenticity and needs study by all.<sup>1</sup> I only intend to cover briefly the main conclusions related to the contemporary period.

For post-colonial South Asian States, neighbours presented the strongest challenges. When hostility amongst neighbours sharpened, it led to sponsorship of insurgency on each other's territory to settle scores. Since decolonisation, South Asian nations, including China, have continuously sponsored insurgencies against each other. The existence of ethnic discontent within each of these countries has provided the opportunity. India, along with the USA, trained Tibet's Khampas in the 1950s; China responded by training Nagas, Mizos and Manipuris.

While India is alleged to have trained the Shanti Bahini of the Chittangong Hill Tracts (CHT), Bangladesh has been playing host to a number of Indian insurgent groups. Within two years of the Naga uprising, the Federal Government of Nagaland (FGN) had developed contacts with the Pakistan Government and Phizo reached East Pakistan. The ISI provided him a false El Salvador passport to reach London. Over ten batches of Naga insurgents were trained in East Pakistan (*DMI Status paper on Naga Insurgency*, 1963); without this help in weapons and training, the Naga insurgents would not have lasted long.

After the Sino-Indian War of 1962, China started training the Nagas, later the Mizo insurgents and finally in the 1970s the Meitei Extremists (ME). Opening of the Kachin corridor as a base was particularly helpful for the Nagas when they lost their traditional bases in East Pakistan after the creation of Bangladesh. At least nine batches of rebel Nagas went to China between 1966 and 1978. After the Chinese training, the Nagas learnt to exploit the surprise factor. By 1969 both China and Pakistan had not only started training Nagas and Mizos but also Meiteis. The Mizo National Front (MNF) was in touch with Pakistan before launching its operation 'Jericho' on 1<sup>st</sup> March 1966. A co-ordinating bureau was set up by China and Pakistan in May 1969 to co-ordinate the

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<sup>1</sup> Subir Bhaumik, *Insurgent Cross Fire* (Lancer Publishers, 1996).



training, funding and arming of insurgencies in the North East (ISI documents recovered by Indian Army after the fall of Dacca in 1971).

The story of India training the Mukti Bahini volunteers is well known; Tripura and Meghalaya formed two of the important bases for their operations. With the creation of Bangladesh, the pattern of external linkage underwent a change. Mizos and Nagas had to relocate their bases in North Myanmar and depended entirely on the Chinese. Once the Chinese began to reduce their involvement, the insurgent groups had to entirely depend on the Kachin Independent Army (KIA) who charged heavily for these services. This also started the beginning of insurgent groups looking for greater financial resources mostly through smuggling and control of smuggling and state Government resources.

After Mujib's death in 1975, the pattern again changed and Bangladesh Intelligence-ISI links began to be gradually established. Today the ISI operates a legal intelligence network out of its diplomatic establishment in Dacca and illegal ones under cover of business and fundamentalist groups. In short, Pakistan is working as per a design, while our responses are faulty. The detailed involvement of Bangladesh with the insurgents and channels of acquisition of sophisticated arms and ammunition from Thailand with Bangladesh Intelligence's connivance was outlined in the Border Security Force (BSF) notes released in November 1995 and the annual press conference by DG, BSF on 27 November 1997.<sup>2</sup> The nexus between Bangladesh Intelligence and the ISI and their help and assistance to the North East insurgents was acknowledged by the then Home Minister Inderjit Gupta in Parliament on 3<sup>rd</sup> December 1996.

In this context, ULFA's contacts with the ISI operations in Bangladesh and its contacts with the Afghan Mujahideen were debated in the Assam Assembly as far back as 1994. The arrest of Anup Chetia in Bangladesh and its refusal to repatriate him to India on one pretext or the other are clear indications of the level

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<sup>2</sup> *Hindustan Times* (New Delhi), 29 November 1997.

of involvement of Bangladesh Intelligence and the ISI's hold on it. ULFA and Bodo militants establishing themselves in Southern Bhutan completes the cardinal circle established by the North East insurgents in our neighbouring countries.

The centre of insurgent activities has shifted once again westwards from the Eastern border with Myanmar to inside Nagaland and Manipur and is spreading westwards within Assam. With their bases in CHT and Sylhet and Southern Bhutan, it has resulted in the manifestation of a more cohesive and potent threat of regional dimensions.

### **China**

Chinese interests in the North East have to be viewed in the long-term perspective. After eliminating the historical and strategic buffer between India and China by annexing Tibet, the Chinese financed, aided and armed Naga, Mizo and Meitei extremists. This was followed by military encroachments culminating in the 1962 conflict. The unilateral withdrawal after the 1962 border war was a part of the psychological containment of India. This was shrewdly followed by the strategic containment of India through regional alliances and the arming of India's neighbours – Myanmar, Bangladesh and Pakistan. India's technological and military modernisation has been effectively countered by technological and weapons transfers to Pakistan in the nuclear and missile fields. The strategy is aimed at building indirect threats to India and in this use Pakistan as a frontline surrogate.

### **Bangladesh and Pakistan**

In spite of the progress on the Chakma issue, the attitude of Bangladesh towards the North East insurgents in respect of providing safe sanctuaries, help and facilities for training and resource mobilisation is one of total benevolence. This is the result of geopolitical dynamics of the area as discussed earlier, and the internal politics of Bangladesh wherein the Awami League Government's ability to react to our request is constrained by the perceptions of the Bangladesh Army, particularly its intelligence organisation and the ISI's hold over it. CHT is still an area of

dominance by the Army and Bangladesh Intelligence, with the full support of the pro-Pakistan lobby in the country. In spite of diplomatic overtures by Bangladesh, ISI operations with full connivance of Bangladesh Intelligence will continue to be the cutting edge of belligerence against India with a direct fallout on the North East. Of special interest in this regard is the Shillong gathering of ULFA, NSCN (IM), United Liberation Front (UNLF), ATTF, NLFT and ISI last year and the Muslim organisations mushrooming in the vulnerable corridors between Karim Ganj (Assam) and Jiribam in Manipur and the area of the Siliguri neck. Apart from diplomatic measures, we need to think of Counter-intelligence and punitive measures against Bangladesh in the long-run.

### Myanmar

Myanmar's attitude is entirely conditioned by their requirements at the ground level and their limited capacity against their own insurgent groups, which has forced them to negotiate and settle with most of them in mutually convenient arrangements. Myanmar continues to be sensitive to our sympathy for the pro-democracy dissidents. Tactically, in their perception, KIA and NSCN (K) in the North and Keren, the Chin National Army (CNA) and Muslims (Rohingias) in the South are a bigger threat and of greater concern to them. Our failure to appreciate their concerns has changed their stance to favour NSCN (IM) in certain border areas.

The traditional trans-border trade and movement is another area of antagonism as well as co-operation. We should be generous in identifying commodities and opening crossing points with the least restriction. The opening of trade at Moreh and Champa has opened an era of co-operation; we should enlarge it for better management and control of narcotic smuggling and contraband trade, as this will result in denial of at least some of the dubious resources to the insurgents. At the ground level, we should fully activate our informal and formal contacts with the Myanmar Army as in the past for better co-operation in joint trans-border activities against insurgents.

Our handling of such sensitive issues with long-term fallout

has been most amateurish, partisan and superficial. It is entirely left to intelligence agencies, particularly the Research and Analysis Wing (RAW), who lack the background, experience and an overall perspective of the problem. This has created complexities both in dealing with the problem and functioning at the ground level. Our handling of the Myanmar dissidents, Chin National Army's Roger group and KNA in recent years in the North East are a few examples.

### **The Ethnic Factor**

A review of the ethnic conflicts in the North East since the beginning of the 1990s and its instigation and sponsorship by insurgent groups in connivance with parochial politicians clearly reveal that it has both a political as well as insurgency-oriented agenda. The Naga-Kuki conflict in Manipur is entirely an extension of NSCN (IM) design to increase their dominance, fight for control of NH 39 and Moreh for illegal resources borne out of narcotics and contraband trade and land grabbing in the Maphou Dam area in Thobal District to corner the compensation money.

NSCN (IM) also surreptitiously propagated successfully the old South Nagaland theme by exploiting the sentiment of Naga identity and interest. In this, Naga politicians played a dubious role with the help of the overground Naga organisations. This was countered by the Kuki politicians by exploiting the Kuki vulnerability to strengthen their political hold by instigating and inviting Kuki/Chin organisations.

The Naga-Kuki conflict in the Peren subdivision of Nagaland is really an extension of the same, except for one difference: while the ruling Nagaland politicians are unhappy over the extension of the NSCN (IM) influence due to their sympathies with NSCN (K), they did little to control the conflict. The NSCN (IM) domination in Dimapur has been further extended to the Itanki Reserve Forest and Naga-dominated areas of Halflong and North Cachar Hills – again a part of the same design. Further down South in the Hmar Area in North Mizoram, although the tension has been reduced by the establishment of Singlung Hills Development Council, the area

remains turbulent and the agreement is not totally looked at favourably by the Hmars in Cachar, Manipur and Tripura. The areas remain a favourite transit route as was proved by Operation "Golden Bird" in 1995.

In Meghalaya, its capital Shillong is being used as a common meeting ground for insurgent groups and the intellectual and supportive political, ethnic and Non-Governmental Organisation (NGO) adjuncts to support insurgent activities. The inter-state boundary dispute between Assam and Meghalaya and Mizoram and Nagaland in these areas provide further opportunity to insurgent groups to operate with impunity in the disputed no man's land.

Taking the totality of the ethnic conflict situation, which has resulted in demographic shifts, extension of insurgent activities, particularly of the NSCN (IM), and the parochial exploitation of the ethnic conflicts by community leaders, the conclusion that one can draw is that nexus between politicians and the insurgents is well-established to achieve their diverse aims. However, the extension of NSCN (IM) influence to the areas discussed above has both strategic and tactical fallout. At the strategic level, we must understand that the ethnic conflict between Nagas and Kukis in Manipur and Nagaland is only an extension of the game of increasing the areas of influence with political connivance from both sides. At the tactical level, the demographic shifts and domination of Dimapur, Itanki Forest, Halflong, North Chachar Hills and Hmar areas in Northern Mizoram and ferment in Eastern and Southern Meghalaya is to create safe corridors for infiltration of men and material.

### ASSESSMENT

That the North East insurgents were never strong on ideology is well proved by their shifting stands, frequent negotiations and accords, splintering of most insurgent movements and their tendency to seek political patronage. Essentially, their core is separatist by nature, anti-establishment tactically, and ethnic in gaining and maintaining their support amongst the people. Their resilience is based on the failures of the state to win over the people and marginalise the insurgents and the strong overground vested

interests to keep insurgency alive. This has also led to disorientation of the insurgent movements and their increasing leaning towards criminal acts of partisan and ethnic killings, extortion, drug trafficking and succumbing to moral and material corruption, particularly easy money.

In the absence of an ideology, insurgents, like political leaders, community leaders and youth, are exploiting heightened ethnic feelings, foreigner's issue and other regional and local issues to gain and retain relevance and power. Central leaders have also used local leaders to gain political patronage and power and in some cases even instigated some insurgent groups in Manipur, Tripura and Assam, thereby giving indirect patronage to insurgency.

The splintering and mushrooming of insurgent groups is the outcome of the 'fear and favour' complex that has been perpetuated in the region. Failure of the state to provide protection to smaller ethnic groups has resulted in their seeking self-protection by forming their own militant groups, the latest being the Zoumi Reunification Organisation in Manipur against Kuki-domination and harassment. Favours and patronage extended to NSCN (IM) by Naga politicians and the feeling of insecurity experienced by the Kukis resulted in Kuki militant organisations coming into existence. Meitei extremists in Manipur similarly have over half a dozen groups, prominent being the United Liberation Front (UNLF), the Peoples Liberation Army (PLA) and the Peoples Revolutionary Party of Kanglepak (PREPAK), each having their own patrons. Patronage of Muslim immigrants (Bangladeshi, erstwhile East Bengal and East Pakistan) before independence by Assamese Muslim leaders and later is well known. As a fallout of the Assam agitation, Pangal-Meitei riots in Manipur and ISI designs in the North East, Muslim fundamentalist organisations with militant offshoots have come up in the North East, particularly in Assam and the Siliguri Corridor.

The support of Naga politicians of Manipur and Nagaland to different factions of the NSCN, Naga National Council (NNC) and the Federal Government of Nagaland (FGN) is well known and needs no elaboration. Over a period of time, these mutually beneficial patronage relationships have developed vested interests in the continuation of the status quo, while they condemn the Centre for

their neglect and their hunger to grab the central funds is growing day by day. Local leadership has become double faced, one for Delhi and the other locally.

Extortion and denial of resources for development are the two ugly fallouts of the Central Government's policy of pumping more money when under pressure and to meet the requirements of political expediency. Political leaders and bureaucrats have used their offices to siphon developmental funds at the cost of real development. Since 1981, more than Rs 30,000 crores have been pumped into Nagaland; with nothing to show in terms of development for the people in agriculture, health, education and civic services. Modern buildings, some finished and others unfinished, both Government and private (of the elite), are the sole testimony as this is where the contracts and opportunities for sponging are.

Corruption, power through money and the gun, and narrow ethnic loyalties have resulted in most of the local politicians and insurgents being entirely motivated and propelled by parochial gains. Insurgency in the North East has become an industry in which the main motive is profit for the people in power both through the ballot and the bullet. In this struggle, the common people continue to be poor and the Security Forces are the 'Fall Guys' for all three – the politicians, the insurgents and the people. In spite of all the noises against the Security Forces, all of them want the SF to be present so as to be able to survive against each other.

Most of the accords in the North East, except the Mizoram Accord of 1986, have become milestones of discord, as these were the outcome of political expediencies and not intended for implementation. They all lacked credibility, sincerity and political will as well as machinery for implementation. Such political arrangements create disillusionment and provide issues for mobilisation of ethnic groups by local politicians and insurgents.

### **Deprivation : The Precipitating Reason**

Most people agree that the factors of isolation, modernisation, ethno-nationalism and cultural insecurity have the cumulative and

precipitating effect of deprivation. Therefore, unless the sense of deprivation is eliminated and the common man's aspirations fulfilled, the dynamics of the situation will not permit a solution. Even this sense of deprivation has its stronger and lighter shades and we need to recognise these. The Naga Insurgency from the very beginning was rooted in their feeling of being separate, with no political, cultural and economic binding links with their neighbouring communities, who were closer to the centre of administration. The British exit severed the link and, hence, the idea of independence. While independent India established political and economic links, emotional links were not established.

The Mizos were the first to declare their unconditional union with India; but they felt cheated when in the sixties the response to the famine was not only tardy but, in their perception, deliberately mismanaged. They have largely got over this feeling, but it is voiced whenever Mizoram feels constrained due to its geographical location at times of crises, as happened in 1994 due to the inability of the Central Government to resolve the face-off between Assam and Mizoram, resulting in acute scarcity of rice. The Chief Minister had to import rice from Myanmar. Meiteis in Manipur feel deprived compared to tribal communities in the state, who receive extra benefits due to the policy of protection. This, to some extent, was rectified when Meiteis were included in the OBC list in 1994.

Both the Assamese and Bodo Militancies in Assam are due to the heightened feeling of relative deprivation. Tribal insurgency in Tripura is due to deprivation as a result of demographic and social imbalance, manifested by the alienation of tribal land.

### THE SOLUTION

The paradigms of conflict resolution and management relevant to the situation in the North East are 'idealpolitick', a co-operative approach and identification of key factors for interaction and escalation of conflicts as they have relevance for conflict resolution and management.

The conflicts in the North East centre around human frustrations



borne out of deprivations of various types in the socio-economic fields, with political articulation for registering the same. The threat and violation of needs for security in the socio-economic fields and the question of identity have generated ethnocentrism, primarily due to perverted political ethos; and aggression or violence is a manifestation of these frustrations. It is also relevant to keep in mind the background of the insurgencies and the genesis of ferment as these highlight the factors which initiated and contributed to the escalation of the conflicts at various points of time. This will help in understanding them and taking remedial action.

The paradigms of idealpolitick and co-operative approach have to be together, as both these are complementary. However, before doing so, it is relevant to clarify certain perceptual issues. The present environment in the entire country is that of realpolitick and a competitive one; it is a bit worse in the North East. You often hear people saying that the real world of politics cannot be changed and therefore let us look elsewhere for solutions. I am afraid such perceptions are dangerous and will only lead to disaster, as they encourage a competitive and confrontational course, which is power-based, adversarial and a win or loose approach to conflict resolution. You cannot talk of peace and a political solution, while still persisting with policies of realpolitick – these are contradictory and confrontationist. We have to have a change in the mindset and start veering towards idealpolitick, which aims at changing the environment for the better.

The start of idealpolitick is in the minds of the policy makers; by understanding the causes of people's frustration and the willingness to work towards removing these. Just understanding and acknowledging are not enough; you have to do something about it. Our failure has been that inspite of understanding and acknowledging these causes, we fall prey to compulsions of realpolitick and solutions never get properly implemented inspite of vast resources being pumped in. This does not mean that response to violence does not have to be effective. In real terms, it means that response to violence has to be effective and well-directed, but simultaneously we should bring about changes in political, social, economic and other systems to eliminate causes and conditions

responsible for the conflicts. The absence of effective responses in the political, social and economic spheres is the main cause for our failure.

The other issue is of the orientation or focus of our policy of idealpolitick and a co-operative response. Since the core issue is deprivation which entirely relates to the people and the common man, the focus therefore has to be the people. So far in all our endeavours, the focus has been on politics and thereby on the politicians and the insurgent groups. Their orientation is entirely on political issues and power, which does not take into account the deprivation of the people. Therefore, no solution arrived at will be lasting; if any, it will induct new issues into the conflict arena. My experience in the North East, particularly in Manipur, has proved beyond doubt that only idealpolitick focussed on the people's deprivations can resolve the problem; this is the real political solution.

The political solution as defined above based on the principles of idealpolitick and a co-operative approach finds wide acceptance, but is difficult to implement because of distortions in our political system caused by vested interests. Its implementation requires good governance entirely oriented to removing people's sense of deprivation and alienation. Good governance is the cement which binds the policy framework of idealpolitick and a co-operative approach to conflict resolution and better management of conflicts; both are essential and one cannot succeed without the other.

Having come to the conclusion that the basis of the solution for the conflicts in the North East lies in idealpolitick and a co-operative approach, we should now try and draw out the parameters of the solution. At this stage, it will also be pertinent to acknowledge that the ongoing conflicts are armed insurgencies in which people's support is essentially due to ethnic links with the insurgents, as well as by a sense of deprivation wherein they see insurgents as representing their frustrations. There is an element of external support in the shape of sanctuaries and material and moral support. Therefore, the solution has to take all these factors into account.

By virtue of its location, the North East is characterised by socio-political instability and economic backwardness. Isolation and inaccessibility continue to influence perceptions. These continue to undermine stability, while the continuous inflow of immigrants, rising socio-economic aspirations, land alienation and lack of infrastructure have all contributed to retarding the process of development and integration. The extension of administration to the peripheral area of the North East was viewed with suspicion and interpreted as interference in their traditional systems, resulting in a revival of the traditional centres of power for mobilisation of people. The situation was further compounded by the distorted political ethos, corruption and maladministration.

The shift in the policy from realpolitick to that of idealpolitick has to be gradual, sustained and visible, as the system at all levels has been subverted over a long period. This shift can only take place if there is political will; merely good intentions and rhetoric will not do. The polity has to develop a consensus that these are national problems and therefore petty politics should be kept out. The change has to start at the top to give it a policy framework and implementation from bottom upwards, so that the public feels the impact, participate in it and provide the necessary legitimacy and boost to the change. It is only with political will backed by public pressure that the administrative machinery, which has become lethargic, insensitive and corrupt, can be rejuvenated.

### CONCLUSION

The foundation of the shift to idealpolitick should be laid on a declared policy to establish legitimacy, credibility and transparency in the government's functioning. Absence of a declared policy has resulted in disjointed – both by the politicians and bureaucrats – and inconsistent and motivated responses. It has led to expediency and tardy execution. In the economic and developmental fields, it has resulted in disorientation, circumventing the system and malpractices and corruption. Unless there is fusion of a well-defined and credible policy based on correct inputs, political will and an efficient and responsible machinery to implement it, success will be difficult. The focus has to be on deprivation of the people. The key is economic development and security.

## Kargil Conflict and Its Aftermath : The Humane Aspect

AIR MARSHAL K C CARIAPPA, PVSM, VM (RETD)

*One year after the Kargil conflict, there is a need to guard against fading public memories of the sacrifices made by our brave soldiers. This article focuses on the need to look after those maimed and the families of those who made the supreme sacrifice during Operation Vijay.*

Warfare today is so transparent, given the pervasiveness of the electronic media and its ability to bring into our homes the horrors of war. You see things as they actually happen. One is that much more acutely aware of the heart-rending battle casualties as they are carried on the shoulders of their comrades. The eyes get moist and perhaps a tear rolls down the cheek of even a battle-hardened and otherwise emotionless veteran who has been through it all, when he sees that great soldier Field Marshal Sam Maneckshaw talking to wounded troops in the hospital in Delhi. What is heart breaking is to see cheerful young men smiling up at him as though nothing has happened to their lives, which alas will never be quite the same again. They have given their all. They believe, because they see all around them so much adulation, that their future is not as bleak as it can be. They believe that the outpourings of support and concern are genuine, which indeed they are. One can but hope and pray that they are not disillusioned, as so many before them have been, once they return to the harsh realities of the real world. There is one young jawan who displays two stumps where his hands once were, and another who has no legs, who look up to the Field Marshal as though nothing has happened. In their eyes, and in their hearts, is a common thread of optimism that the Nation will stand by them in their adversity. Will it?

As a former Air Force pilot, I have seen death in its most horrific forms. I have all along considered myself a hardened person, inured

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*Journal of the United Service Institution of India*, Vol. CXXX, No. 540, April-June 2000

by my profession not to show the true emotion one experiences within. But who would not be moved? Nothing I have experienced whilst in Service has had the effect of the Field Marshal's visit to the wounded. Death is final. It is the living who must go on with their lives. The maimed officer or jawan, the paraplegic, the young widow with a child or two, perhaps the middle-aged one who has the responsibility of bringing up young adolescents who need the firmness and counsel and the companionship of their father who will not return to teach young Samira to drive. There are aged parents whose sole support was their son. He promised he would return soon to get his sister married. He returned all right, but not in the manner they or anyone else could or would imagine.

What happens to these many, faceless people? Will they become statistics in 'babudom'? Government will promise petrol stations, gas agencies and STD booths etc. Oh yes! Land sites too on which to build their homes. But when the last round has been fired, and the smoke and dust has settled, will all these promises be fulfilled? Even today a government department has promised widows of those killed in Kargil a STD booth. But there is a catch. It is only for one year! Why? We are all familiar with the unsavoury scandals that have screamed across newspapers stating how political favour and patronage has worked in such allotments. Will all this be repeated yet again? We have heard politicians declare in public forum, in the presence of serving and retired Armed Forces personnel, that there is no need for the country to spend as much as it does on the defence budget. In his reckoning the last war was fought over twenty years ago. There has been no 'war' since then, therefore the Army should be used for civil construction and "teaching discipline". The same person very recently suggested that the country be "handed over to the Army at this critical juncture." Incidentally, he has forgotten, or is it that he is unaware of the internal war the Army is fighting in Jammu and Kashmir, in Assam and the other Northeastern States because he is so far removed from the scene of action. He forgets too that the Army is always there to bail him out if the internal situation gets too hot for his government to handle.

The big question that must be addressed now is "who will care for the living?" Who will bother about the maimed who smile into

cameras cheerfully and want to be back with their colleagues? What happens to Rifleman..., or Grenadier..., or Havaldar... who has lost an arm, or a leg, or worse, both arms or both legs? Will he be rehabilitated by the Government? There is no doubt that the Armed Forces do look after their own, but will Centre or State step in to take on this responsibility? Will they issue necessary orders that all battle casualties are to be employed in Public Sector Undertakings or in government offices? Will they provide the necessary training to equip these men for their changed circumstances in life? This is the need of the hour if the morale of our fighting men is to be maintained. Has the Ministry of Human Resource Development even considered counselling either grieving families or the maimed how to cope with the new situation that confronts them? Is this something that only the West can think of? The Government must issue orders now and not wait till it is all over. But it is not only the Government who has to find employment for such heroes, the private sector has an equally important role to play. In fact it is so much easier for the corporate world to train such persons and help in their adjustment process and then provide employment. A wounded soldier, sailor or airman should be able to return to his hometown after he has left the Service with his new appointment orders in his pocket. He must be rehabilitated in keeping with his status. There must be no bickering because he has been given a job that someone else has coveted. If it were not for him that job would not have been there. How many are aware of, or recall that famous epitaph...

"And when you go home,  
Tell them this of us and say  
For your tomorrow  
We gave our today."

# The Muslim World and Globalisation

## PART II

LT GEN ERIC A VAS, PVSM (RETD)

### SOUTH EAST ASIA

In contrast to West Asia, religion does not count as a significant political factor in Malaysia and Indonesia, though both are Muslim majority states. Although Malaysia is the home of 185 million Muslims, which is more than the Muslim population of all the Arab countries combined, it has never been considered an Islamic state. Thus, Vice President Al Gore, while addressing the financial crisis confronting the states of East Asia, made a frank speech in Kuala Lumpur in November 1998 in Dr Mahathir's presence. Gore linked democracy with economic reform and argued that "people will accept sacrifice in a democracy, not only because they have had a role in choosing it, but because they rightly believe that they are likely to benefit from it...People are willing to take responsibility for their future if they have the power to determine that future ....Among nations suffering economic crisis, we continue to hear calls for democracy and reform...We hear them today, right here, right now – among the brave people of Malaysia...All who love freedom are obliged to redeem people's faith in self-government. Investments move in the direction of strong and deep democracy – and so, too, has our world history."

In September 1999 Dr Mahathir, while embroiled in domestic politics, ordered the arrest of Anwar Ibrahim, his free-market oriented deputy prime minister, on charges of sodomy and corruption. This arrest and subsequent ill-treatment of Anwar who was sentenced to a term of imprisonment united Dr Mahathir's diverse opponents. They formed an Alternative Front composed of the Islamic Party of Malaysia which champions a wider use of Islamic law; moderate Muslims of the National Justice Party led by Wan Azizah, the wife of Anwar; and ethnic Chinese voters of the

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*Journal of the United Service Institution of India*, Vol. CXXX, No. 540, April-June 2000

Democratic Action Party. Despite their differences, all three parties agreed on one thing – they loathe Dr Mahathir.

In October, the Alternative Front issued a common manifesto which devoted much space to economic management. Its proposals were almost embarrassingly mundane and covered aspects which Dr Mahathir has handled quite well over the past 18 years. This was probably an attempt at shrewd politics. With the economy reviving, voters were being reassured that the Alternative Front was not a revolutionary alternative; the opposition was promising that it will be business as usual. The Alternative Front was hoping to reduce Dr Mahathir's overwhelming majority in the general election that was scheduled for mid-2000. Sensing the growing coherence of his opponents, Dr Mahathir, in September, suddenly announced that the elections would take place in November 1999. With little time to prepare, the Alternative Front nevertheless managed to make a dent in the two-third majority of the coalition led by Dr Mahathir, which won 56 per cent of the vote, ten per cent less than it won in 1995. Significantly, no party appealed directly to religious issues.

Indonesia's 200 million people make it the fourth most populous nation in the world. 30 per cent of the population is Muslim. With its 7,000 inhabited islands and 300 languages and dialects, it is at the best of times a difficult place to run. In June 1998 Indonesia held its first democratic election in recent years to choose a legislature. The winning party was that of Megawati Sukarnoputri, popular daughter of Indonesia's first President Sukarno, and staunch critic of President Suharto who succeeded him. Megawati's party however failed to win enough votes to give it a majority in the People's Consultative Assembly (PCA), which is the body that chooses the president. In October 1999 the PCA opted for Abdurrahman Wahid as President. This disappointed many supporters who saw Megawati as the pre-eminent people's choice. Their sense of having been cheated was muted by the subsequent selection of Megawati as Wahid's vice president.

Wahid, an erratic Muslim scholar, is intelligent, charming and witty. He is honest, respected and widely known in Indonesia. He represents a clear break with the past. Wahid has recently suffered



a stroke. He is frail, almost blind, with no experience of government, and faces a hard task. He is not a supporter of the old regime. Although he owes his position to his leadership of a large Muslim organisation – the world's largest – he is a firm believer in secularism and democracy. He knows that the great majority of Muslims are uninterested in a religious agenda. However, many Muslims lament that their compatriots lack religious zeal and would like to see the country more Islamic. Wahid owes his victory to the votes of these people. He must now resist them if they demand any erosion of the separation of the mosque and state. His second preoccupation would be the economy, which requires careful nursing. His third priority would be control of the spread of corruption. This process is going to be painful for some, but is necessary if Indonesians are to feel they now enjoy the rule of law.

Even more important than the country's moral integrity is its physical integrity. The secession of East Timor in October 1999 convulsed the nation, which is still trying to rebuild its economy after a devastating economic collapse. However, the departure of the annexed territory of East Timor, sanctioned by the PCA, lifts a burden from Indonesia which has prevented it from enjoying the weight it deserves in world councils. But this does not mean that other restless outposts of the archipelago, such as Aceh and Irian Jaya, must also depart. Apart from the threat of secession, ethnic and communal riots have flared up on isolated islands between Muslims and Christians, and between local islanders and migrants of Chinese descent. Wahid's main task will be to hold Indonesia together and to curb communalism, whilst persuading dissidents in far-off places that the rule of Jakarta is benign, not autocratic.

### **SOUTH ASIA**

Many mistakenly look upon the Kashmir dispute as a continuation of a Hindu-Muslim cultural conflict that has been taking place over the past thousand years and will continue forever. India has been warding off invasions from the Northwest long before the birth of the Prophet Mohammed. After the advent of Islam, the First Battle of Panipat (1556) was fought between two Muslim armies. This was a simple power struggle. Indians welcomed the Moghul Emperor Akbar. The world's history books refer to him as Akbar

the Great because he was a wise and tolerant ruler who understood the Indian psyche and embraced the country's traditional concept of unity in diversity. Akbar's policies laid the foundations for stable Moghul rule, which lasted over 200 years. It is only when Emperor Aurangzeb adopted intolerant laws, which violated the acceptance of pluralism and diversity, that his empire began to crumble. He provoked dissent among his subjects and tore the delicate fabric of unity, which resulted in the eclipse of the Moghul Empire. (Not surprisingly, school history books in Pakistan extol Aurangzeb and not Akbar).

The British East India Company's initial aim was to expand its commercial operations in India. When Moghul rule began to crumble, they attempted to safeguard their economic interests by raising mercenary forces and arranging alliances with co-operative Indian rulers. The Great Indian Mutiny of 1857 was a joint Hindu-Muslim attempt to revive Moghul rule and fight against creeping political rule by foreigners. The attempt failed. But Britain's Parliament was forced to intervene, curb shameless commercial depredations, freeze the territorial boundaries between British India and the princely states, and establish formal governance over the Indian sub-continent under its jurisdiction. The Raj replaced commercial greed with the rule of law, appointed enlightened civil servants, provided tolerant governance and projected the prospect of preparing India for eventual self-rule. India came to respect British administration and laws, admire its new educational system, and welcome its inspiring political doctrines of democracy and liberty, and learn the English language.

As a group, Hindus were quick to educate themselves, learn English and face the challenges of the industrial age. However, there were many, including Mahatma Gandhi, who welcomed scientific knowledge but opposed the evils of industrialisation. Muslims, who made up over 30 per cent of the population, were reluctant to accept scientific knowledge and modernisation because they believed that this challenged the wisdom of the Quran. The majority rejected modern private and government schools and clung to their traditional *maddrasas*. Since the roots of their religion were outside India, many looked to West Asia and other foreign Muslim communities for guidance.

The gradual establishment of elected local civic bodies, municipal corporations and provincial assemblies gave the British Raj credibility and stability. This was a period of a bourgeois Indian Renaissance, which threw up a galaxy of outstanding Indian scientists, writers, politicians and leaders in every walk of life. Then the Raj began to lose its credibility. Anglo-Indian relations, which had been based on democratic ideals, deteriorated into an imperial master-slave relationship. The Raj lost its reputation for impartial governance when it began encouraging religious differences in an attempt to divide and rule. It hoped that it would survive as a neutral arbitrator between warring communal forces and a British presence in India thus be perpetuated. Indians resented this and fought for freedom from repressive rule. There was never a religious quarrel between Hindu India and Christian Britain. It was, as always, a freedom struggle between arrogant autocratic rule and democracy. The Indian National Congress, a secular political organisation, spearheaded the struggle for freedom.

Mr M A Jinnah was a shrewd barrister and a staunch member of the Congress Party. He enjoyed eating pork and drinking wine. He was a strict disciplinarian who believed in the rule of law. He resigned from the Congress because he disagreed with Gandhi's mass disobedience movement. He joined the Muslim League and took advantage of Britain's "divide and rule" policy to side with the British and thereby gain a political edge over the Congress. His tactics were to keep branding the Congress as a Hindu organisation during the freedom struggle and thus play on Muslims' fears of Hindu hegemony. He appealed to the religious fervour of simple people in order to win his short-term political objective. Ironically, after Partition, more Muslims remained in India than the number in Pakistan.

Jinnah knew that religion was a poor foundation for statehood. He felt that once he came into power, he could control events to suit his larger purpose. After Partition, he tried to wipe the communal slate clean. In his inaugural speech to the Pakistan Constituent Assembly on 11 August 1947, he publicly launched a plea for secularism when he said, "In course of time all these angularities of the majority and minority communities will vanish...We are starting with this fundamental principle that we are all citizens and equal

citizens of one State...I think we should keep that in front of us as an ideal, and you will find that in due course of time Hindus and Muslims will cease to be Hindus and Muslims, not in the religious sense, because that is the personal faith of each individual, but in the political sense as citizens of the state." But Pakistan's feudal elite lacked his perception and did not share his views on secularism. Jinnah soon came to realise that he had awakened communal forces, which were beyond his control. On his deathbed he confessed to his doctor that "the creation of Pakistan has been the greatest blunder of my life."

In August 1947, the people of newly created Pakistan expected the Muslim-majority princely state of Jammu and Kashmir (J&K) to join Pakistan. The Maharaja could not make up his mind on whether to accede to Pakistan or India. He would have preferred to keep his state independent. Neither India nor Pakistan wanted this. The sparsely populated northern districts of J&K supported by local militia units, which were officered by the British, declared that they were a part of Pakistan. The few State Force units, which were located in that area, withdrew into walled forts and later surrendered when they ran out of food. There was very little violence. Elsewhere in J&K, State Forces attempted to maintain law and order in a rapidly deteriorating environment.

Encouraged by the prompt secession of the northern districts, and the knowledge that India had no direct road communications with J&K, Pakistan felt that it could take over the whole state without much difficulty. It launched several militia columns along the main roads leading from Pakistan into J&K. These were commanded by army officers. State Force units fought gallant rearguard action as they fell back towards Naoshera, Poonch and Srinagar. When the Maharaja finally made up his mind and opted for India, Pakistan-sponsored guerrillas were threatening Srinagar airfield. The Indian Army was flown in using civilian Dakota aircraft. This operation would not have been possible without the wholehearted support of Sheikh Abdullah and Muslim workers of the National Conference, who rallied public support to provide the Army with civil trucks and food.

J&K's accession to India was constitutionally legitimate. India

took its complaint of Pakistani aggression to the UN Security Council. In a three-part resolution, the UN firstly asked both parties to accept a cease-fire. Secondly, Pakistan was ordered to pull out of J&K and hand over charge to a UN peacekeeping force. Lastly, both were to accept a UN supervised plebiscite to ascertain the will of the people of J&K. Both countries accepted the UN resolution and a cease-fire came into force on 1 January 1949. Pakistan refused to carry out part two of the resolution. So part three, the plebiscite, was never possible. The aberrations of the Cold War prevented a rational debate of the Kashmir issue in the UN.

Within India, Muslims form 20 per cent of the population, a substantial minority group that is spread all over the country. To begin with, they were bewildered and felt that they had been abandoned by Muslims who had migrated to Pakistan. Extremist Hindu organisations accused them of being Pakistani fifth columnists and told them they were not welcome in India and should migrate to Pakistan. The wounds of Partition took some time to heal. Hot-headed Hindus and Muslims were quick to pick a quarrel. If the police were slow to react, this would flare up into a major communal riot. However, the dust of those dark days slowly settled down. India kept faith with its ancient philosophy that all religions lead to God, and with its tradition of tolerance. Over the years that followed, India was able to hold numerous fair and free elections to state and central assemblies, create an independent judiciary, uphold a free press, and effect steady economic growth. The establishment of numerous independent democratic institutions strengthened Indian secularism and the concept of unity in diversity.

During this period, a strong industrial base was established. However, little political will was displayed to control population growth and to remove illiteracy. Regional cultures and languages were encouraged by different state governments. By this process, India's 200-year advantage in the use of the English language was neglected. Thus, though many competent and powerful regional leaders emerged, they were unable to project themselves at the all-India level because English continued to remain the only effective link language. Neglect of English also hampered Indian leaders from projecting their rightful stature on the international media. Some states are attempting to amend this shortcoming because English

has become the language of globalisation. Meanwhile, satellite communications, personal computers and the Internet have begun to create an international technological community. The spread of this net is being accelerated each month.

Twenty-three years after Partition, South Asia was to witness a political power struggle between Muslim West Pakistan and Muslim East Pakistan. India was not directly involved in that ethnic struggle. But because of West Pakistani repression, over six million Bengali Muslim refugees poured into India, which as a result was forced to enter the fray as a concerned third party. There was nothing religious about the Indo-Pak War of 1971, which undermined the rationale of Pakistan as a separate religious state. No wonder a law has been enacted in Pakistan making it a criminal offence to discuss the desirability for the creation of Pakistan. The penalty for violating this law is imprisonment. In order to unify their country, successive Pakistani governments have perpetuated the myth of Islam under threat from Hindu infidels.

During the first 45 years of its existence, Pakistan lived in the shadow of US power and the Cold War. This blinded it to the realities of history and geography. It built up an inflated image of its role in nation-building and its military potential in South Asia. Pakistani leaders wasted those formative years warring with India and feeding their people with negative and intolerant ideas. Because it failed to build and consolidate democratic institutions, the country's political system was never able to establish healthy roots. This led to a succession of military dictators who kept on using the J&K issue as an excuse for perpetual confrontation with India so as to remain in power. Many Pakistanis have begun to believe that this is the only way to keep their country unified. This further undermines the growth of democracy.

During that time, Muslims in India learnt to exercise their electoral rights as free citizens. They have broken out of their "minority" complex. Today, many have become Indian icons in the fields of art, literature, music, sport and in the film world. Many Indians of all denominations regret the partition of India, but few have any quarrel with Islam or the existence of Pakistan or the people of Pakistan. But all condemn those who sponsor senseless

cross-border terrorism. Pakistanis who know this and understand the practical need for friendship with India dare not speak the truth. Those that do speak out are beaten up and branded as traitors. Pakistani religious zealots, like their Hindu counterparts in India, fear literacy, democracy, modernity, diversity and tolerance, a free press and the liberation of women.

It would be wrong to look upon the past 52 years of tension on the border with Pakistan as a Hindu-Muslim quarrel. From that day in August 1947 when Jinnah delivered his inaugural speech to Pakistan's Constituent Assembly, till today, there is a power struggle taking place within Pakistan between the forces of intolerant oppressive religious bigotry and liberal Islam. (This is not unique. Ideological struggles take place continually within India, and within other societies all over the world because the struggle to uphold truth and freedom is never ending).

India's stand in J&K rests on the acceptance of four realities: firstly, both India and Pakistan have divergent interests in the state; secondly, these differences cannot be resolved by force; thirdly, ascertaining the wishes of the people is important; lastly, this dispute can only be resolved by bilateral talks as outlined in the Simla Accord. Nawaz Sharif won a two-third majority in Pakistan's parliamentary elections on a 'friendship with India' pre-election manifesto. Serious Indo-Pak talks to resolve the Kashmir issue began in early 1998. The Indian Prime Minister travelled by bus to Lahore to meet his counterpart and both reaffirmed their commitment to the Simla Accord. The talks were suspended in May 1999 when Pakistan launched an attack across the Line of Control (LoC) in the Kargil sector. The attack was repulsed. India regretted that the trust which had been engendered by the Lahore Declaration had been shattered. Talks could now resume only if Pakistan abides by the Simla Accord and Lahore Declaration.

On 11 October, Pakistan's Prime Minister Nawaz Sharif announced the premature retirement of General Musharraf, the Chief of Army Staff (COAS), whilst the latter was flying home from Sri Lanka in a commercial aircraft which was ordered to divert and not land at Karachi. The Army in Pakistan reacted swiftly. It placed the PM under house arrest and took over Karachi airport. After

landing at Karachi, Musharraf resumed command of the army. He later announced the suspension of provincial and central assemblies. Nawaz Sharif faces serious charges of kidnapping, hijacking and terrorism.

These tragic events are a symptom of the continuing internal power struggle taking place in Pakistan. It is a combination of many factors which came to a head with the sacking of the COAS. The military believes that it has a special place in Pakistan's ideology of nation-building. Nawaz Sharif has been challenging this special position when he earlier got rid of two naval chiefs and one army chief. He felt that he was strong enough to do the same to Musharraf who was a *mohajir* migrant refugee from India. He hoped to replace him with Lieutenant General Ziauddin, who was not in the established chain of command for the assignment of COAS. He failed to appreciate that the Army was not prepared to tolerate any further political interference in its accepted sphere of administration.

General Musharraf in his initial appearance on Pakistan Television spoke to the nation in English and projected an image of a modernist. He later said that he hoped to follow in the footsteps of his ideal, Kemal Ataturk. History tells us that it is easier to alter the political boundaries of a state than to change the mindset of its people. If Pakistan attempts to follow Turkey's path to secularism and modernisation, it would be a drastic change in a country which is perceived as a state that harbours extremist elements who are obsessed with Islamic fundamentalism and have a visceral hatred for India. Peace with India would radically alter the ethos of Pakistan's Army, which has cultivated a schizophrenic mindset detached from economic and social realities about its military capabilities. It would mean that it would have to come down to earth and give up its romantic dreams of presiding over the break-up of India. Can General Musharraf do all this and survive in power?

It is for the people of Pakistan to decide what type of governance they want. If liberal democratic forces prevail, there will be peace on India's western borders; if the religious bigots or irrational autocrats prevail then there will be tensions. The direction in which Pakistan is likely to move in the coming years is uncertain



and unpredictable. Meanwhile, the Indian Prime Minister has said that he is willing to resume meaningful talks with Pakistan provided an atmosphere of trust is restored and the military rulers accept the Simla Accord and Lahore Declaration.

### CONCLUSION

The internal politics of Muslim states, like that of any other state, will throw up rulers and opposition parties. Radical Islamic opposition parties, which have been permitted to come into power, soon learn the rules of the game and become moderate rulers. Nevertheless, some Muslim states are not prepared to permit fundamentalists to come into power for fear that they will subvert democracy and establish a harsh dictatorship. A serious reflection on the realities of contemporary Muslim societies indicates a clear picture of diversity and competition rather than anything resembling a united international Islamic Front.

USA is the most powerful nation in the world. Its cultural and economic power has a direct and indirect impact on every other society and on the process of globalisation. It is unreasonable to expect that any state can adopt a rigid uniform foreign policy towards other states. It is therefore not surprising that America's approach towards the Muslim world also varies and is dependent on geopolitical realities. Islamic states also display pragmatic policies while dealing with their neighbours, and have sometimes given geopolitics greater priority than Islam. The authoritative US National Security Council document *A National Security Strategy for a New Century* prepared in May 1997 avoids any coupling of the ideals of democracy or human rights with West Asia. This document emphasises that America's primary interest is security in that region; it does not consider the promotion of democracy in West Asia a particular aim. The regional goal is defined as "peace and stability".

The US is concerned about control of Pakistan's nuclear weapon programme and Pakistani-based terrorism. It is therefore likely to suppress its repugnance for the military coup d'etat in Pakistan in the interest of furthering its primary concerns. Its policy towards Pakistan will be "peace and stability". The omission of the words "democracy and human rights" in US goals for West Asia

and Pakistan is in sharp contrast to other areas such as Africa and Southeast Asia, where promotion of democracy is the central focus of US policy. It would be simplistic to characterise this as proof of double standards.

But it is difficult for any country to morally justify a two-track diplomacy when faced with blatant criminal acts of terrorism as displayed in the last week of 1999 when five Pakistani terrorists hijacked an Indian Airlines plane whilst it was in flight from Kathmandu (Nepal) to Delhi. One passenger was killed and another wounded before the plane eventually landed in Kandahar (Afghanistan). After prolonged negotiations, all hostages were released in exchange for three Pakistani militants who were being held in Indian custody. India alleges that there is enough evidence to show Pakistan's complicity in this terrorist act. Pakistan denies any complicity in the hijack. It assures the international community that the hijackers will be apprehended and tried should they seek asylum in Pakistan.

It is imperative that India tackles terrorism methodically and professionally, rather than through knee-jerk reactions and panic measures when faced with a crisis. This creates an illusion of security and does more harm than good. What is required is well-trained security forces and good governance so that perpetrators who are apprehended are dealt with swiftly by our courts. (In J & K the courts have yet to punish and sentence a single act of terrorism). The greatest violation of human rights is a lethargic administration and an ineffective judiciary that refuses or fails to punish perpetrators of even the most heinous crimes, and abandons the common man to the savagery of the forces of disorder.

Our projection of terrorism and the management of the media leave much to be desired. We must stop looking upon terrorism in communal terms. Terrorism is the employment of merciless violence against innocent civilians for a variety of ends. There is no Islamic, Hindu, Sikh or Christian terrorist. There are simply terrorists who should be dealt with as common criminals. Our diplomats should tone down their frenetic campaign to have Pakistan declared a terrorist state. Cold evidence of Pakistani complicity should certainly be presented, but without fanfare. This will have a greater impact

on the international community. Even if we convince the world of Pakistan's perfidy, we should accept that others will continue to be guided by pragmatic geopolitical considerations and national self-interest rather than moral principles. We have to protect our defenceless citizens against terrorism entirely by ourselves, and we have to get our house in order to do this competently.

Meanwhile, India, like many other nations, is being subjected to the pressures of science, technology, global communications and a free-market economy. It is impossible to escape these influences. It is unreal to expect that things will somehow remain the same. Change and the process of evolution are inevitable. Many leaders blame America, globalisation and modernisation for their internal problems. They fear that the lifestyles of their respective societies are under threat. Some Muslim states believe that the best counter for this is Islamisation. In fact there can be no Islamic, Hindu, Christian or Buddhist answer to the process of technological evolution. One has to rely on reason and search for truth with open eyes. Wise leadership can attempt to lessen the pain by preserving the core values of a society.

The most wrenching by-product of the Scientific Revolution has been to render untenable many of our most cherished and most comforting beliefs. The tidy anthropocentric certainties of the old religions have been replaced by a cold, immense, indifferent Universe in which humans are relegated to obscurity. However, individuals do not have to abandon their religious faith, even when they can see "the emergence in our consciousness of a Universe of a magnificence, and an intricate, elegant order far beyond anything our ancestors imagined." The scientific certainties of the 19<sup>th</sup> Century have been equally disturbed by the ambiguous implications of quantum mechanics, which even Einstein found unacceptable when he famously protested, "God does not play dice." It would seem that the Universe is sufficiently sublime for "the essentially Western objective view of consciousness arising from matter and the essentially Eastern subjective view of matter arising from consciousness [to] apparently coexist. Clearly, consciousness, matter and energy are inextricably linked." Not surprisingly, quite a few scientists have begun developing a sneaking fondness for simple mysticism.

Charles Darwin had explained that it is not intelligence and strength alone, but the ability to adapt, that ensures the survival of a species. The most profound challenge facing all communities, irrespective of their religious or scientific beliefs, is to acquire the understanding and wisdom to come to grips with the revelations of the 20<sup>th</sup> Century and the exponential growth of knowledge and technology that is going to occur in the 21<sup>st</sup> Century. It is heartening that the Indian Prime Minister in December 1999 declared that his government is planning for the emergence of India as a knowledge-based superpower. (It is even more heartening that some chief ministers have pre-empted the Prime Minister and already begun the process in their respective states.) This gives an opportunity to all Indian boys and girls, irrespective of their caste or creed, to develop their personalities and become better Muslims, Hindus, Christians, Sikhs, Parsis, Buddhists, etc, so that they learn to share and care for one another and prosper in diversity.

#### REFERENCES

1. Augustus Richard Norton, "Rethinking United States Policy Toward the Muslim World," *Current History*, February 1999, p.51.
2. Samuel P Huntington, "The Clash of Civilizations?," *Foreign Affairs*, Winter 1993.
3. Samuel P Huntington, "When Cultures Collide," *Civilization*, June/July 1999, p.75.
4. Ray Kurzweil, *The Age of Spiritual Machines* (Viking, 1999).
5. Fouad Ajami, "The End of Pan-Arabism," *Foreign Affairs*, Winter 1978-79.
6. Carl Sagan, "Science and Technology in the 20th Century : Good and Bad," *New Perspective Quarterly*, vol. 16, no. 3, 1999, p.25.
7. Lt Gen E A Vas, "India's Response to Globalisation," *Indian Initiative for Peace, Arms Control and Disarmament Research Paper*, January 2000.

# Army Training Command : A Perspective

LT GEN VIJAY OBEROI, PVSM, AVSM, VSM

## General

**A** rmy Training Command is the youngest command of the Army. It completed eight years of its existence on 01 October 1999. Eight years in the life and times of an organisation is a fairly substantial period, especially when the organisation is an apex headquarters of the Army. It may therefore be a good time to take stock of this organisation and see whether it has been able to achieve the goals and objectives it was designed to meet.

One other reason for writing this article is that I find a singular lack of knowledge, more or less across the board, within as well as outside the Army, about the structure, role and functioning of this Command. I hope this article will fill this gap and at least the awareness levels of the readers about this organisation will be enhanced; hopefully they will also spread the word to those who find reading a bothersome chore!

## The Beginning

In the 1980s, a need was felt to have a high powered organisation in the Indian Army which could be entrusted with the responsibility to review, update, evolve and disseminate concepts and doctrines; formulate training policy for the Army; plan, co-ordinate and monitor institutional training; and act as the apex body relating to all training functions in the Army. Accordingly, existing models in a number of countries were studied and the Army Training Command, better known by its acronym – ARTRAC, was raised on 01 October 1991 at Mhow in Madhya Pradesh. Why was Mhow chosen for locating the headquarters of ARTRAC and why was it moved out within less than two years? These are pertinent

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*Journal of the United Service Institution of India*, Vol. CXXX, No. 540, April-June 2000

questions which need to be explained, if for no other reason than for the record.

Mhow was essentially selected because the premier all arms training institution of the Army, the College of Combat, was located there and had been in existence at Mhow since the early Seventies. It was visualised that there would be a symbiotic relationship between Headquarters ARTRAC and the College of Combat. However, this was not to be because of 'turf battles' on the one hand and a lack of appreciation of the role of this new command headquarters, which few understood and even fewer appreciated! Perhaps the Army Commanders commanding this new 'animal' were also less than forthcoming in educating the environment and making 'the threatened' understand the logic and significance of what ARTRAC was all about.

I must also place on record that at this juncture the accommodation at Shimla became available, with very few takers. This combination of fortuitous or not so fortuitous events and circumstances saw the fledgling Army Training Command moving from the plains of Central India to the cooler climes of Shimla in the Shivalik Hills. The move was staggered, but ultimately everyone was 'in' by late 1993. The inhabitants of Shimla welcomed the arrival of Headquarters ARTRAC, having missed the presence of a Command Headquarters for a couple of years since the move of Headquarters Western Command from Shimla to Chandimandir in 1985. It was a case of both nostalgia as well as 'one-up-manship' – after all how many cities in India can boast of a resident Army Command.

### **The Growth**

Headquarters ARTRAC has grown in a graduated manner. From a threadbare headquarters with 'nothing' to command in 1991, it has travelled a considerable distance, with training establishments of the Army coming under its purview steadily and slowly. This started in 1994, with the placing of six training establishments under its command. In 1995, this figure rose to 12 and next year to 13. Finally, in 1998, all Category 'A' training establishments, bar the odd one, were placed under the direct control of Headquarters

ARTRAC. At the same time, Headquarters ARTRAC was also entrusted with the task of carrying out training evaluation of all Category 'B' establishments, viz, the training centres.

The bringing of all training establishments under the direct control of Headquarters ARTRAC met one of the main roles of this Command, viz., 'plan, co-ordinate and monitor institutional training'. There has been criticism in some quarters to the effect that Headquarters ARTRAC is deviating from its main task of 'concept development' in its quest for taking under its wing all training establishments of the Army. Such critics do not appreciate that 'concept development' cannot be carried out in a vacuum. It is a dynamic process which not only needs feedback, comments and ideas from the environment, but also requires a sounding board and training laboratories (for want of a better word) where concepts and doctrines can be tested, refined and modified. Training establishments are best suited for this. It is also necessary, nay essential, for all training establishments to interact with each other, have a dedicated headquarters which can be approached for both routine and specialised requirements, and which acts as a binding force for nurturing the many facets of institutional training. It needs to be appreciated that the Indian Army has a vast network of training establishments, which till recently were islands of isolation, carrying out their assigned roles more or less independently, with minimum interaction with each other. This resulted in little or no modernisation of training, as the establishments became casualties of remaining in a groove, with courses following one another, year after year, with hardly any changes, innovations or upgradation of training techniques. These lacunae are hopefully a thing of the past, as Headquarters ARTRAC has now brought in new ideas, sharing of expertise, and a desire and need to move away from the once preferred option of 'status quo'. These changes, themselves dynamic in nature, augur well for training in the Indian Army, which continues to occupy an important place in its operational preparedness and growth.

### **Concept Development**

The 'concept development' role of Headquarters ARTRAC

also needs elucidation. Headquarters ARTRAC assists the Army in its preparedness for war by the development and dissemination of concepts and doctrines for current and future warfare. This is pitched at all levels of war, viz, the strategic, operational, as well as tactical levels. The formulation of doctrines and concepts encompasses not only techniques relating to the tactical employment of troops at various levels of war, but also the development of concepts and doctrines in the fields of logistics, human resource development (HRD), and training.

The doctrinal aspects of the role of Headquarters ARTRAC include the following:-

- (a) Evaluation of concepts and doctrines, including supplementary concepts.
- (b) Evaluation of organisations, tactical and technical developments, and innovations in other armies.
- (c) Organisation of macro level exercises, wargames and seminars.
- (d) Doctrinal aspects of Nuclear, Biological and Chemical (NBC) Warfare.
- (e) Planning and conduct of joint and combined operations.

In the last two years or so, we in Headquarters ARTRAC have departed from the traditional approach to concept development. The earlier methodology was a comment-based one, where we asked for comments from all and sundry on the concept we were working on, prepared a draft and asked for comments again. Sometimes this process was carried on to absurd limits. I found that this time-consuming approach resulted in the end product becoming elusive and at times even outdated. We now have a different approach. We organise informal brain-storming sessions or formal seminars, or at times both. The ideas, comments, recommendations and views culled from such interactions are then incorporated in our concept papers and we issue them in a much



earlier time frame now. This changed format also enables us to incorporate inputs from a much larger cross-section of stake holders and others.

Recent highly acclaimed and useful seminars have been on the Systems Approach to Training, Nuclear Doctrine, Force Structuring, Disaster Management and Offensive Operations. An international seminar on United Nations Peace Keeping Operations (UNPKO), successfully conducted and much appreciated, also needs a mention.

Doctrine development ultimately translates into the publication of documents which can be disseminated to the field force, as well as to training institutions. The traditional and somewhat sedate General Staff Pamphlets have increasingly given way to Army Training Notes (ATNs), ARTRAC Papers, Concept and Approach Papers, Liaison Letters, brochures and even leaflets. In addition, to enhance general awareness both within and outside the Army, a number of unclassified documents have been published. Another category is of publications which can generate a healthy debate on doctrinal issues. The capstone document in this regard, titled 'Fundamentals Doctrine and Concepts' is now under distribution, down to unit level.

### **Combat Development**

Combat development is not a role formally assigned to Headquarters ARTRAC, although in the past two years we have carried out considerable work in this sphere, on a case assignment basis. It would not be out of place to mention here that having been assigned the task of suggesting changes in the structures and organisations of the Army, ARTRAC has recently completed a very detailed study on the size, shape and structure of the Army of the next century. While it would be premature to discuss details, suffice it to state that the restructured army of the next century, called Army XV (the framework is pitched in the year 2015) will be a tailor-made army for fighting the battles of the next century. The Army would be technologically upgraded, would be lean, and would be relevant to the demands and challenges of the future battle fields. Having carried out this study, we in Headquarters ARTRAC

feel that we are well suited to be formally assigned the task of 'combat development'. Once this is done, we can move a step further and authorise an experimental force to ARTRAC in the next phase. This will enable us not only to evolve doctrines and structures, but also to test and evaluate them in the field. Refinements will then be possible and it is visualised that we would then gain widespread acceptability with the field force, a facet which is currently lacking.

### **Human Resource Development (HRD)**

In the increasingly high technology world of tomorrow, where battles as well as structures and organisations will rely heavily on sophisticated technology, the need is not only to have technologically aware manpower in the Army, but quality manpower which can operate with confidence on the future battle-fields. Hence, HRD assumes added importance. An important role of Headquarters ARTRAC is to develop and refine doctrines relating to HRD, for which dedicated staff exists. The HRD Doctrine for the Army was distributed in 1998.

### **Logistics**

Logistics is another area of focus in Headquarters ARTRAC. The Indian Army tends to view logistics with a Nelson's eye. Our commanders at different levels do understand the importance of logistics, but do not allocate sufficient time, resources and attention to it, preferring instead to wax eloquent on tactical and operational matters, which are considered glamorous and even 'sexy', where 'guts and glory' hold sway and which are considered to be genuinely the domain of Generalship. It is perhaps for this reason that our logistics structures, organisations, methodology and indeed even the basic philosophy are old and antiquated. This is one area where reforms, on a very big scale, are urgently required. We in Headquarters ARTRAC have a dedicated staff looking at all aspects of logistics – macro to micro. Their brief is to look at the subject in detail and recommend changes, refinements and add-ons, so that we change our present logistics structures and adopt those which are relevant, need-based and efficient.

## **Training Doctrines**

The last facet in the doctrinal category, and by no means the least, is doctrines related to training. Till very recently, there were no reforms or improvements in the methodology of our dealing with training. Innovations in training technology could be identified more by their absence. In fact, our training systems had become rusted on account of repetitiveness, lack of ideas, inadequate attention to imparting training and continued reliance on a few antiquated training aids. Headquarters ARTRAC has addressed this issue squarely and today the Systems Approach to Training (SAT) and Training Needs Analysis methodologies find ready acceptance in our institutional training. Our next objective is to take them to the field force so that the vast amount of training conducted in our units and formations is also planned, addressed and conducted according to these norms.

## **Training Technology**

Training technology is another field of endeavour which is being closely looked at in ARTRAC. High training costs and shrinking budgetary allocations, coupled with the need to conserve our operational equipment, have spurred us on to focus on developing and exploiting advanced training and simulation technologies. In these fields, ARTRAC is carrying out pioneering work so that a large variety of simulators and wargames can be fielded and our reliance on using operational equipment on the one hand and conducting periodic large-scale exercises in the field on the other is substantially reduced. This is handled by the Training Technology Section in Headquarters ARTRAC, whose two field arms are the Simulator Development Division (SDD) located at Secunderabad and the Wargaming Development Centre (WARDEC) located at New Delhi. In addition, great stress has been laid in the last two years on computer-based training in our training establishments. Information Technology is thus being harnessed to develop a large number of computer-based training (CBT) packages for instruction in all our training establishments. These CBT packages are being prepared using the versatile multimedia tools which are proliferating in our country now. In sum, we have travelled some way already

on the road of training technology. Our intention is to completely move away from the 'chalk and talk' method of instruction, which unfortunately has held sway for decades.

### **Distance Education**

An important thrust area of ARTRAC in the coming years is Distance Learning. We have already embarked on this venture in a small way by identifying and conducting one course in each of our major training establishments through this mode. In the coming years, we in ARTRAC intend to push this concept further so that we not only save and conserve resources but also increase the number of trainees, without any increase in the number of courses in our establishments or the strength of each course.

### **Jointness**

Headquarters ARTRAC has the unique distinction of having Naval and Air Force officers on its staff. They are in the joint operations section of the Doctrine Branch and are tasked to develop joint and combined doctrines, concepts and procedures.

We in ARTRAC strongly believe that without jointness we will be seriously handicapped in conducting meaningful operations in any future conflict. Towards this end, we have taken a number of actions to enhance jointness. As a first step, formalised meetings of C-in-C's of the training commands of the three Services have been instituted twice a year. These formalised meetings have been very useful and result-oriented and will no doubt take us on the path to jointness. However, much more needs to be done by all the three Services, at all levels, for comprehensive jointmanship. Headquarters ARTRAC is promoting jointness as an article of faith and we hope others will join us in this endeavour.

### **CALL**

Headquarters ARTRAC has now set up a section in its Doctrine Branch, which will be known by the acronym CALL. It stands for Centre of Army Lessons Learnt. It is tasked to compile,

review and provide a realistic feedback to the field force as well as to our training institutions details of lessons learnt in operations as well as in training exercises. These lessons learnt will also be incorporated in concepts, doctrines, drills and procedures being developed by Headquarters ARTRAC. In the long term, CALL will act as a repository, data bank and historical section for future research and access to sifted and compiled information.

### **Dualities**

The raising of ARTRAC and its gradual growth has resulted in duality in some respects with existing structures and organisations. ARTRAC inherited the mantle of the Military Training (MT) Directorate of Army Headquarters, but encompassed much more, a review of which I have attempted in the preceding paragraphs. Some areas of duality need to be highlighted. Briefly, these are:-

- (a) MT Directorate has been reduced in size, but needs to be pruned down further. It will continue to exist as an entity to perform training related staff functions of Army Headquarters, but it needs to shed, in their entirety, those functions which are now being performed by Headquarters ARTRAC.
- (b) Areas of duality between Perspective Planning (PP) Directorate as also certain other directorates at Army Headquarters and Headquarters ARTRAC need to be identified and rationalised.
- (c) The relationship of arms and corps directorates to training within their respective arms and corps has changed dramatically, with Headquarters ARTRAC assuming the mantle in most respects. Consequently, there is a need for increased interaction between arms and corps directorates on the one hand and Headquarters ARTRAC on the other.

### **Challenges**

Tomorrow's Army is taking shape today. Headquarters ARTRAC is leading the effort to propel the Army into the Twenty First Century. Our Challenges are two-fold. Firstly, we must optimally train the Army of today and hone its skills, and secondly, we must

simultaneously build and train the Army of tomorrow.

Changes are never easy. ARTRAC not only has to remain contemporary in every sphere of its responsibility and functioning, but also have a clear vision and direction for the future. The challenge of training for warfare in the 21st Century, which would be characterised by rapid technological advances and changes in the very nature of war, cannot be met by conventional and staid organisational structures or outmoded processes of decision making. The process of change is therefore a journey and not a destination.

### **Vision**

ARTRAC's role for the future has to be enunciated in terms of the doctrinal needs of the Army for the 21st Century. External threats and challenges are well defined. Internal tasks allocated by the nation are also well known. We have demonstratively articulated our nuclear capability. We must, therefore, change, in order to sustain the current pre-eminence in the sub-continent and move towards being a regional power of consequence in the emerging new world order.

ARTRAC goals, therefore, will be as follows:-

- (a) Lead an intellectual initiative to upgrade and improve the efficacy of our doctrines and concepts.
- (b) Promote jointness at a rapid rate so that Army XV can conduct fully integrated joint operations across the full range of operations.
- (c) Develop leaders at all levels, who are professionally competent, confident and self-reliant to command formations, units and sub units of Army XV.
- (d) Synergise institutional training into a common interactive learning and HRD process.
- (e) Supervise, conduct and re-engineer, where necessary, all training activities in training institutions, to include entry, continuity and institutional training.

- (f) Carry out close interaction with the field force and arms/corps directorates at Army Headquarters on all aspects of training.

The recent impetus in the growth of ARTRAC augurs well for the future. This accelerated growth has been made possible by the dedication and diligence of staff at Headquarters ARTRAC, the support provided by Army Headquarters and the regional commands, which continues to be forthcoming, and the enthusiasm, willingness and hard work displayed in ample measure by the commandants and staff of all our training establishments. It is this teamwork, willingness to accept change, sincerity and commendable dedication which have enabled ARTRAC to grow rapidly in the last two years in particular and the last eight years in general. The process is far from over, as I visualise ARTRAC playing an even more important and comprehensive role in the future in building a strong, technologically savvy and highly motivated Army, which will be ready to win the battles of tomorrow for the nation.

### **Conclusion**

The complexities of modern warfare, the changing strategic environment, coupled with rapid technological developments, demand a fully trained individual who is well conversant and confident in the use of weapon systems and equipment, which are a product of modern technology. This has to be achieved in a resource constrained environment and in the reality of heavy commitment of troops on operational duties on the border and on counter-insurgency tasks.

ARTRAC was set up to focus exclusively on the highly important subject of training, so that it received undivided and detailed attention. In the last eight years of its existence, this new organisation at the apex level has matured and is now focussed on the intricacies of all facets of training in the Army. Its role, charter and functioning need to be understood by the environment so that its progress towards achieving its tasks does not get hindered by lack of understanding, parochial interests or a fear that it will tread on various toes in its march towards efficiency and synergised execution of its allocated tasks.

## Pakistan's Kashmir Fixation\*

LT GEN A M VOHRA, PVSM (RETD)\*\*

"Unless Pakistan gains the political maturity necessary to come to terms with the irrevocable facts of history of its creation and stops aspiring to achieve militarily and politically unachievable goals, it is difficult to see any silver lining on the dark clouds hovering over the Indian sub-continent". This conclusion of Colonel Gurmeet Kanwal, a Senior Fellow at the IDSA, in Chapter 6 - "Pakistan's Military Defeat" - is an apt comment on the prevailing political situation in our region. Air Commodore Jasjit Singh, in the introduction to the book, points out "the one characteristic that continues to mark Pakistan's policy towards India from its very inception is the animosity and hostility of its ruling elite toward India". In Chapter 2 - "The Army in Pakistan", Jasjit argues, "a strong nexus grew between the civilian bureaucracy and the military. Both were drawn (and continue to be drawn) from the same, mostly land owning social class and Punjab-Pathan ethnic groups". He quotes from Keith Callard's *Pakistan: A Political Study* (London 1957) to point to the evolution of this political elite. "In Pakistan, the political parties have waxed, waned and suffered eclipse. Political leaders have argued and reduced each other to impotence... the state has been run largely by the civil service, backed by the Army". Jasjit observes that after the 1997 elections, the democratic system appeared to be consolidating itself in Pakistan, albeit with a strong tendency towards authoritarianism. The ruling elite of the military bureaucratic combine saw its traditional hold over the power structure eroding. The Gujral Doctrine and the Lahore process were seen countering the reliance on animosity towards India which supported their special position in the country's power structure. Gurmeet points out that Pakistan's military establishment was unable to accept the Nawaz Sharif Government's commitment to open trade with India and liberalising the visa regime and encouraging people to people contacts. As ten years of proxy war had failed to yield any tangible results, General Musharraf approved the Kargil operations after taking over as Chief of the Army Staff in November 1998.

As stated in the blurb, this book places Pakistan's latest war for Jammu and Kashmir, the fourth, in the context of the earlier three; the first in 1947/48, the second in 1965, and the third commencing with the attack to take Saltoro Ridge in June 1987, which later converted into proxy war in Jammu and Kashmir (J&K).

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\*Kargil 1999 – Pakistan's Fourth War for Kashmir. Edited by Air Cmde Jasjit Singh (Retd) (New Delhi : Knowledge World, 1999), pp.342, Rs. 430.00, ISBN 81-86019-22-7.

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Journal of the United Service Institution of India, Vol. CXXX, No. 540, April-June 2000



The first chapter on "The Kashmir Issue" provides the backdrop of the accession of the State to India and highlights Pakistan's perception of the strategic importance of J & K. In the words of Maj Gen Akbar Khan "One glance at the map was enough to show that Pakistan's military security would be seriously jeopardised if Indian troops came to be stationed along Kashmir's western borders."

History tells a different story. No threat has developed for Pakistan from J&K either in the 1965 or in the 1971 Wars. This mountainous terrain provides little scope for manoeuvre and none for the deployment of mechanised forces. Hence Indian offensive ripostes have been in the plains; the Shakargarh-Sialkot and the Lahore-Ferozpur sectors. There is scope for operations in the Rajasthan-Sindh sectors. The mechanised offensive forces of India or Pakistan cannot be deployed in J&K.

On the establishment of a democratic government in Pakistan after the death of Zia-ul-Haq in an air crash in August 1988, the Army withdrew from centre-stage. Power was exercised by the troika of the President, the Prime Minister and the Army. In Chapter 2, Jasjit traces the reacquisition by the Army of the role of final arbiter in Pakistan. After their complete defeat in the 1971 War, the Army's fortunes revived as Bhutto had to rely on it for internal security five times between July 1972 and June 1974. In Baluchistan, enforcement of State authority was at the cost of 10,000 people killed. In 1988 Benazir Bhutto stated, "I am in office but not in power".

Allocation for defence continues to be about 24 per cent of the total Federal Government expenditure. It peaked to 74.21 per cent in 1966-67 and stayed above 50 per cent upto 1972-73. Since then there has been a gradual scaling down to above 30 per cent until 1996-97. The latest available figures for 1998/99 is 23.92 per cent which is bound to be exceeded. The important point to note is that defence expenditure and debt servicing have been exceeding total revenue; 272 billion against the expected revenue of 265 billion rupees in 1995. The figure for 1998-99 is 420.6 billion against the expected revenue of Rs 367 billion.

The significance of the northern axis along the Indus River Valley and the roughly parallel Shyok River Valley and Pakistan's strategy of keeping the Kashmir issue alive for coercive diplomacy against India is analysed in Chapter 3 – "Battle for Siachen" – by Jasjit. As Pakistan can choose the time and place of attack, India has to ensure constant military presence and preparedness in one of the most inhospitable terrains in the world. Brig Pervez Musharraf was commanding the Special Service Group (SSG) Force that carried out the abortive attack in September 1987 against

Saltoro Ridge to take the Siachen Glacier. Jasjit observes that with these failed attacks to capture Saltoro Ridge began Pakistan's violent phase for the "liberation of Kashmir" on 31 July 1988 and the shift in the axis of war back from Ladakh to Kashmir.

This second phase of the third war is covered by Tara Kartha, a Research Fellow at the IDSA, in Chapter 4. From the beginning of the Afghan operations, tales of siphoning away of weapons were noted by the US and other sources. A decade later, Islamabad had enough weapons to be able to field a fully equipped force for insurgency in the Kashmir Valley. Selig Harrison notes that some 63 terrorist training camps, half in Pakistan Occupied Kashmir (POK) and half in Pakistan, had been functioning since 1988. Tara Kartha covers the recruitment, arming, training and grouping of the militants. New outfits like the Lashkar-e-Toiba and Pan-Islamic organisations like the Markaz-e-Dawa-al-Irshad (MDI) emerged. In fact, Lashkar-e-Toiba was the fighting arm of the MDI which was formed in 1987. As both Lashkar-e-Toiba and the HUA (Harkat-ul-Ansar) were drawn basically from Pakistani and foreign personnel, with only a few recruits from POK, they had little conception of the Kashmiri ethos and demanded food, money and later women. The use of foreigners is therefore proving counterproductive. The possibility of a Mujahideen army with an equal mix of regulars and irregulars is mentioned.

In his survey of the Kargil war, Jasjit deduces that Pakistan made this ingress on two assumptions :-

- (a) The nuclear umbrella permits offensive action without the risk of a general conventional war.
- (b) The coalition government in India is weak and indecisive. India is militarily weak and unprepared.

One can come to some pertinent conclusions vis-a-vis nuclear deterrence. Nuclear weapons deter only a nuclear exchange. Conventional wars are possible between two nuclear weapon states (NWS). After the Second World War all conventional wars have been of a limited nature, in that opposing forces used their armed strength and conventional weapon systems but for limited objectives. Jasjit concludes that "the ability to fight and win a limited war where nuclear weapons are not allowed to enter the equation, is likely to be the hallmark of successful national strategy in the future".

As for Pakistan's assumptions and operational plans, the quotation from Altaf Gauhar's piece – "Four Wars One Assumption", on page 133 of the book, is appropriate. It highlights Lt Gen Sahibzada Yaqub Khan's

observation on the high hill tops on the ridge line between the LoC and India's defences. He observed that these posts, totally covered by snow, would be extremely difficult to maintain and that as Foreign Minister he would find it difficult to justify Pakistan's military action.

One of the participants in an All India Radio discussion, broadcast at 9.30 PM on 16 June 1999, had pertinently observed that the intruders were ill-prepared to stay on the features occupied by them and where the Indian forces do not evict them, the coming winter will. This ill-conceived plan which had been discarded by Generals Zia and Jahangir Karamat was approved by Pervez Musharraf, who certainly is guilty of ignoring an internationally respected principle of not underestimating one's enemy.

The grit and determination of the Indian Infantry is highlighted by Gurmeet Kanwal. He also gives credit to the FGA aircraft of the Indian Air Force (IAF), and the guns, rocket launchers and mortars of the Indian artillery for the concentrated fire support. "The IAF had a difficult task... Never before in military history has an air force had to attack ground targets, well defended by air defence weapons, at heights ranging from 15000 to 18000 feet". He draws some valuable lessons; acquisition of aerial and ground surveillance systems, military satellite with one metre resolution, ground sensors in remote areas. There is need to strengthen 'Humint' (human intelligence) and real time dissemination of intelligence.

The IAF was first approached to provide air support on 11 May 1999 with the use of helicopters. The Cabinet Committee on Security (CCS) gave its "go ahead" to the IAF to mount attacks on the infiltrators without crossing the LoC on 25 May.

D N Ganesh, a Joint Director at Air HQ, has narrated the air aspect – the 'IAF in action' – the peculiarities of the target, "near invisible humans" on various hill tops and slopes. Lucrative targets available on the other side of the LoC were scrupulously avoided. By 12 July 1999, approximately 1200 sorties had been flown. Operation *Safed Sagar* was a milestone in the history of military aviation.

AVM Kapil Kak, Deputy Director IDSA, has surveyed the international response to the Kargil intrusions and comments that the episode was Pakistan's military-diplomatic 'Waterloo'. He observes that Pakistan's foolhardy venture isolated it. The USA, the G8, Australia, Israel, South Africa, Zimbabwe, Chile and Russia criticised the violation of the LoC, and the last termed India's military action to evict intruders as the right of self defence. The American administration turned "full diplomatic heat on Pakistan"; General Zinni of the US Central Command was sent to

Islamabad to ask Pakistan to pull back to its side of the LoC. As a result "Nawaz Sharif rushed to Washington in the first week of July 1999 and agreed in his talk with President Bill Clinton ... that Pakistan will pull out its troops..." This agreement is mentioned in an earlier chapter by Gurmeet Kanwal.

In the final chapter, "Beyond Kargil", Jasjit introspects on a number of important issues varying from the state of preparedness in democracies to surprise, the nature of war and National Defence Doctrine. He rightly observes that war as an instrument of policy is becoming less viable and wars that take place would be limited. Another observation that appears logical is that "the preferred method of employing military power for political purposes will, in most cases", be forces that do not lead to continued armed conflict – air power and naval forces. Would this exclude cases of territorial disputes between countries with contiguous borders? Jasjit suggests that India should rely increasingly on air power to deter war both through its denial dimension as well as punishment capabilities.

*Kargil 1999* is a well reasoned and well written book which records Pakistan's fixation and the consequent wars with India. It also analyses a number of security issues rationally.

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## Assessing Military Logistics\*

CDR SURESH MALHOTRA\*\*

The author of the book has poured in his thirty-four years of experience into a well-researched book. He is from the Army Ordnance Corps, which is responsible for providing the Indian Army material support from sewing needles to tanks.

The theme of the book rests in the lines, "The real test of logistics support is that it is capable of absorbing most of the operational situations, be they predicted or unpredicted." The book highlights the importance of the logisticians, "Our endeavour to make them more efficient operational commanders may, in all likelihood, become counter productive if they are not made aware of the complexities of making material requirements available for their operational plan. In its relation to strategy and tactics logistics assume the character of a dynamic force, without which the strategic concept is simply a paper plan..." "A US army exercise where a computer simulated exercise was conducted by their corps with mission of conducting a deep attack to seize an operationally critical objective. It was established that the Combat Service Support (CSS) had as much relevance as the Main Battle Area (MBA)."

The author has dealt with the principles of logistics in detail and its planning aspects under various headings: Equivalence, Mobility, Momentum, Flexibility, Dispersion, Feasibility, Timeliness, Sustainability, Continuity, Accountability, Maintainability, Standardisation, Integrability and Interdependence, Communication, Management Information System (MIS). Examples have been quoted in support of the refinements carried out by the American experience in Vietnam, the European experience, NATO system and the Russian system. Sustenance in desert operations, counter insurgency operations, jungle operations, and snow operations, have been covered adequately to enlighten the readers of the gigantic complexity that is faced by the logisticians in the Indian Army.

The author has also dealt with various aspects of Defence Production. The Army alone holds an inventory costing more than 50,000 crore rupees consisting of over 5 million items. The author has made his observations with respect to the warehouse problems and has

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\***Military Logistics : The Third Dimension.** By Brig Parmodh Sarin (New Delhi : Manas, 2000), pp.416, Rs. 795.00, ISBN 81-7049-090-1.

\*\* Cdr Suresh Malhotra currently holds the Admiral R D Katari Chair at the USI Centre for Research.

recommended that a committee be formed under the "Ministry of Defence Production" to establish criteria for the planning programme in order to achieve: efficient means of procurement, increase the capacity to produce these selected items, assessing the trade-off between war reserves and production base, and maintaining an adequate production base. Indigenisation and the benefits and costs of a Defence Industrial Base (DIB) have been discussed.

Economics of logistics and bureaucracy have been discussed. "Of all the subjects to which economics would have a natural application, it is remarkable that 'defence' has been neglected almost entirely, especially in India. The ignored fact is that there is an important relationship between economic strength and logistics capacity and capability. He points out how it takes years for the files to move at various levels. While the prices keep escalating, the equipment in the hands of the troops keeps ageing and getting outdated thus leading to greater problems of maintenance and up keep.

The author, while discussing, 'Teeth to Tail Ratio' has mentioned in brief about the work culture. "... the heavy thrust of trade unionism, caste based intakes where professional efficiency is seconded to other considerations, impact of politicians, and what is 'wrongly' described as "work culture", results in productivity being severely restricted. There are depots where the industrial workers contribute hardly 3 to 4 hours of productivity in a day. The management is held to ransom if any effort to create a disciplined environment is made".

The author through "Looking Ahead", "Automation and Logistics Management", "Asset Visibility", "Integrated Logistics Support System" has envisioned the complexities, tentative solutions in the role of logistics support, infrastructure and economics. He points out how in today's environment where major operations, in all likelihood, will involve the Army, the Navy and the Air Force it might be more pragmatic and economical if an 'integrated logistic support system' is brought into use. The author has also incorporated the theoretical aspects in resource management. ABC analysis, VED analysis, SAP analysis and FSN analysis with respect to purchasing philosophies, inventory management, warehouse management and Bar Coding etc, have found their appropriate slots in the book to facilitate readers in grasping the complexities that the logistics acquire.

The author has further made a case for a National Logistics Grid and has discussed the probable alternate scenes like precautionary hoarding syndrome, panic buying, etc that can occur. A book worth reading—and absorbing.

## Short Reviews of Recent Books

### **Strategic Appraisal : The Changing Role of Information in Warfare.**

*Edited by Zalmay M Khalilzad and John P White (Santa Monica, CA : Rand, 1999), pp.452, Price not indicated, ISBN 0-8330-2663-1,*

Some military savants dismiss the phenomenon of information warfare as needless hype created by the technocrat to establish another brahminical barrier of knowledge. Others deem it to be a new form of war. The truth perhaps lies somewhere in between, as the authors of this Rand study for the US Air Force bring out very eloquently, in the process dispelling most of the mystique surrounding information warfare. Having chosen to discuss the role of information in warfare rather than information warfare, the entire gamut is explored by some of the most renowned exponents on the subject to include, apart from the editors, John Arquilla, David Ronfeldt, Michele Zanini, Jeremy Shapiro and social scientists Francis Fukuyama and Abram N Shulsky.

Set in three parts, Part 1 discusses the implications and effects of information technology on the international system and the American military. Part 2 explores the opportunities and vulnerabilities offered by information technology to the USA. Though quite a few issues covered may be common knowledge, a summary of divergent view points would prove useful. In the final operative part, lessons of the ruminations for the US decision makers are presented. The ambit thus covers a wide spectrum ranging from the likely role of the American military enterprise in the future, how world polity, economy and military will be affected in the information age, emergence of networks as a major organisational paradigm in conduct of war, and opportunities presented by information warfare in the basic dimensions of warfare such as knowing the enemy, yourself and the ground, controlling forces, achieving speed and decisiveness. The vulnerabilities created by information technology are also discussed in detail, with suggestions for reducing them. The impact of information technology on military organisations is very perceptively analysed by Fukuyama and Shulsky benchmarking from the emergence of commercial organisations, while the musings on ethics and information warfare outline the conduct of just wars in the information age.

What emerges thus is a perceptive and exhaustive analysis of the changing role of information in warfare vis-a-vis the traditional concepts of conflict. The book would be a very useful primer for military leaders and scholars alike. Information Technology also clearly highlights that the challenge is not merely envisioning the shape of warfare in the years

ahead, but how the rapid pace of change generated by IT can be leveraged to advantage by adapting existing precepts and structures to warfare in the information age.

*Colonel Rahul K Bhonsle, SM*

**Causes of War : Power and the Roots of Conflict.** By Stephen Van Evera (New York : Cornell University Press, 1999), pp.270, \$ 35.00, ISBN 0-8014-3201-4.

As may be expected from an Associate Professor at MIT, Evera turns his analytical skills onto dissecting the causes of war with compelling diligence. As befits the subject, he ably marshals his admirable scholarship to also expound on the preventive measure. The book therefore has both academic value as also policy relevance. For this reason, its utility in our part of the world is enhanced by the war brinkmanship that has of late been extant here.

His is a contribution to the Realist discourse by making it more rigorous, and thereby enhancing its explanatory power. His hypothesis is simple, it being that war may result from false optimism; perceived advantages of speedier mobilisation and attack; desire to exploit windows of opportunity or vulnerability, when resources so gained are deemed cumulative; and, lastly, when there is an expectation of easy victory. The book comprises chapter-length analysis of these, sprinkled liberally with examples from military history. Interestingly, his comment on the nuclear revolution is that it is a benign phenomenon when rational-actor states believe in the logic of deterrence - which is that in being punishable, they are deterable.

There does exist a temptation to test his hypothesis against the Kargil War. It can indeed be convincingly demonstrated that it was launched by Pakistan under the false optimism of illusions of easy and cheap victory; by exploiting a window of opportunity that was otherwise being shut by Indian domination of the Kashmir situation; by taking advantage of seizing the initiative; and, lastly, by laboring under the cult of the offensive. This digression only reinforces the several other case-studies that bear out Evera's contention - first established in the Ph.D thesis submitted at Berkeley in 1984.

Clearly, this book is simply written - a 'must read', if only for the insights it offers on the measures to avoid the scourge of war.

*Major Ali Ahmed*



**Air Power in the New Millennium.** By Air Commodore N B Singh (New Delhi : Manas 2000), pp.284, Rs. 595.00, ISBN 81-7049-076-6.

The meteoric advances in aero-space technology in the 20<sup>th</sup> Century has seen this extra terrestrial medium exploited in warfare ever since the First World War. However as technology continues to outpace military doctrine encumbered by dogma, optimum exploitation of potential of this medium has been evident only recently. Air Commodore N B Singh has attempted to blend the doctrines and technology of aero-space power in the coming millennium to provide us an insight into the future role of air power with particular reference to the Indian subcontinent.

Commencing with a study of the doctrines of air warfare in its nascence, nurtured by heretics as Douhet and Mitchell, Singh carries out a survey of the development of air power during the First and the Second World Wars, while a detailed analysis of the Middle East conflicts between 1967 to 1973 and particularly the Yom Kippur War of 1973, provides the main backdrop of the study. How new technology systems impacted air warfare during this period makes interesting reading, illustrated by numerous tables and graphs. Precision Guided Munitions (PGMs), Surface to Air Missiles (SAMs) and Air to Air Missiles (AAMs) followed by Electronic Counter Measures (ECM) and Electronic Counter Counter Measures (ECCM), use of UAVs and military space vehicles was to change aerial warfare forever. The air war in Lebanon in 1982, which was won on the basis of EW superiority denoted by electronic support systems as EW aircraft, Remotely Piloted Vehicles (RPVs) and UAVs and command and control warfare and the Gulf War in 1991 which saw full fructification of air power, have been well covered.

In the final chapter the impact of air power on regional security in South Asia is discussed through a survey of its use in various wars fought by India since 1947 including a brief glimpse of *Operation Vijay*. A military balance of the three antagonists India, Pakistan and China, strategic missile forces and the nuclear dimension are also touched upon. Likely tasks and force structure for the IAF in the coming years are finally evolved. The need for a modern aircraft based force, its doctrinal and organisational dimensions including little known use of air power in the nuclear scenario and low intensity conflicts has also been included. Air Commodore N B Singh has thus covered a vast gamut of issues, exploring the possible dimensions of air power in the new millennium, providing an insight into a possible charter and role for air power in the future. However, the wide range of the study leads to diffusion and loss of focus belying the reader's expectations of seeing the rough contours of air power in the new millennium. The technological dimensions of aero-space power is

changing so rapidly that lessons based on air combat in 1973 would appear dated merely two and a half decades later. Nonetheless a seminal work of interest for students of warfare particularly air warfare in the subcontinent.

*Colonel R K Bhonsle, SM*

**Indian Army.** By Lieutenant Colonel Gautam Sharma (New Delhi : Reliance Publishing House, 2000), pp.222, Rs. 295.00, ISBN : 81-7510-114-8.

Though there are several books published recently on national security and military strategy, there is hardly a publication to enlighten the reader on the composition and character of the Indian Army. Even the scholars who study and analyse global strategies and suggest national security measures may not know the difference between the Sikh Regiment and the Sikh Light Infantry or the Army Service Corps and the Army Ordnance Corps. The book explains the organisation of the army with its rich heritage and history under the British Raj and further during the half century of independence. Col Sharma's book has covered regiments and corps of the Indian Army, the Territorial Army and the NCC. Colonel Commandants since 1947, battle honours, mottos, badges, brief history are also given.

A must for every unit library and for all concerned with national security.

*Subedar Major N Kunju (Retd)*

**FAULTLINES.** *Journal of Institute of Conflict Management. Volume 1, Number 1, pp. 142, Rs 150 per issue.*

According to the blurb, *Faultlines* is the first journal in the Indian sub-continent to bring an inter-disciplinary focus upon issues of internal security and conflict management, and on related areas of public policy. Hopefully, it will serve as an outstanding source, both for basic data as well as for research papers on issues of civil strife and internal security in South Asia. The journal is edited and published by Mr KPS Gill, Former Director General of the Punjab Police.

In the lead article, "Endgame in Punjab: 1988-1993", a lengthy report in four parts, the Super Cop recounts how he went about ending militancy in Punjab. The article is replete with valuable lessons for higher commanders committed to counter-terrorism. It mostly quotes from Mr Gill's book, *The Knights of Falsehood*. Although a very well written article, it lacks originality for a regular reader of newspapers.

Ms Arundhati Ghosh, Former Indian Ambassador and Permanent Representative to the UN Conference on Disarmament in Geneva, in her article "Terrorists, Human Rights and the UN", describes how the terrorist groups of different origins have gained legitimacy in the eyes of the UN through various non-governmental organisations (NGOs), in the Northern Hemisphere. As the Southern countries are considered less credible than individuals and NGOs, the UN bodies are becoming a sterile fora of North-South confrontation. She cites the case of ULFA, (United Liberation Front of Assam) whose members enjoy near total immunity in the UN premises, so much so that Anup Chetia, its 'Secretary-General' and Sasha Chaudhary, its 'Foreign Secretary', made statements to the 53rd session of its Commission on Human Rights, courtesy the Society for Threatened People, an ECOSOC-accredited German NGO.

In his article "Pro-active After Pokhran" Pravin Swamy, Chief of Mumbai Bureau for *Frontline*, tries to establish that the shift in strategy from reactive to pro-active has resulted in large scale massacre of innocent Muslims at the hands of Hindu activists in Doda District of Jammu and Kashmir (J&K). One wonders how this piece of sensational journalism has found a place in such a prestigious journal.

Dr Sudhir Bloeria, one-time Special Commissioner of Rajouri and Poonch Districts of J & K, writes how he effectively contained militancy in his jurisdiction. He had gone about institutionalising the co-ordination between various agencies, instead of leaving it solely to interpersonal relationships. Unfortunately, with the withdrawal of Special Commissioner at a crucial stage, this vital link in a close knit team was broken. This very well written article suggests a viable blue-print for anti-militancy administration.

In the last article of the number under review, Mr KTS Tulsi, Former Additional Solicitor General of India, points out the short sightedness of letting the Terrorist and Disruptive Activities (Prevention) Act 1987 (TADA), lapse without discussion in Parliament in 1998. He very ably brings out that our law makers, though sub-consciously, regard everything Western as superior, and have failed to grasp the need for laws which will be efficacious in the Indian situation. The provisions of Indian Law, due to inadequate safeguards for those charged with responsibility of providing justice to victims, are favourable to terrorists.

Though, with poor orthography, the Journal could be of great value to formations deployed in counter-insurgency and anti-terrorist roles. It can be obtained from INSTITUTE OF CONFLICT MANAGEMENT, PO Box 11, GPO, New Delhi-110 001, at a discounted subscription of Rs 500 per annum.

*Major General Yatindra Pratap*

**Regional Security in South Asia. The Ethno-Sectarian Dimensions.**  
*Edited by Nancy Jetly (New Delhi : Lancers Books, 1999), pp.515,  
Rs. 750.00, ISBN 81-7095-072-4.*

Internal security concerns in practically all the countries of South Asia have been to the fore for some time. Distinguished scholars and policy makers, from within and outside the region, have analysed in this book the reasons for the turbulence in the region.

A consistent view expressed by practically all the authors is the centralisation and manipulation of power by political opportunists as the primary cause of turmoil and violence and suggest a re-designing of state structures that could assist in bringing about greater cohesion. The editor faults the lack of fulfillment of aspirations of the underprivileged as a factor for greatly sharpened ethnic identities and political polarisation.

As a generalisation, the essays suggest that ethnonationalism as a social disorder stems from the narrowly defined interests of the ruling elites of a majority ethnic group culminating in an expression of secessionism as is the case in Sri Lanka. Inter-state migration is yet another complicating factor. With its spillover effects across borders, severe tensions develop between the immigrants and the indigenous population when the former demand their political and economic rights as is the case in Bhutan. In summary, the suggestion is that the ethnic landscape of South Asia demands a dispassionate assessment and a generous treatment of economic and political grievances, especially of the dispossessed, to redress the imbalances of the old.

Here is a book that could give policy makers a fresh outlook on security issues in South Asia.

*Air Marshal K D Chadha PVSM, AVSM (Retd)*

**Kargil : A Wake-Up Call.** *By Ravi Nanda (New Delhi : Lancers Books, 1999), pp.161, Rs 350.00, ISBN 81-7095-074-0.*

This is the first book on *Operation Vijay* authored by noted defence analyst Colonel Ravi Nanda. The book, based on unclassified information was completed in September 1998. The hurried effort does show at places in the form of repetitions and typographical errors.

Pakistan's game plan including the politico-military involvement has been analysed in detail. An insight into India's intelligence failure is also provided. The author posits that the intelligence failure at Kargil is a natural consequence of our historical neglect of national security issues.

This has lowered the preparedness levels of the armed forces. A higher defence organisation and an immediate revamp of the service conditions are needed to avoid a repeat of similar failures in the future. The role of media, diplomacy, nuclear backdrop and future strategy for dealing with Pakistan have been examined in a provocatively interesting style. The book quite rightly pays glowing tributes to the junior leadership and men of the Indian Army and the Air Force.

A must read book. The deductions arrived at are remarkably similar to the Subrahmanyam Committee report.

*Colonel Anil Sharma*

**Kargil Blunder : Pakistan's Plight India's Victory.** By Major General Y Behl (New Delhi : Manas, 2000), pp. 205, Rs. 495.00, ISBN 81-7049-120-7.

Even after fighting three wars in 1947, 1965 and 1971, the glimmer of hope for a peaceful settlement of the Kashmir problem on bilateral basis between India and Pakistan existed. Kargil has culminated in a rethink of our patience towards Pakistan. It has in fact shaken the faith of any peaceful settlement with Pakistan. *Kargil Blunder* is a bold assessment woven to reflect the truth and sequence of events by some of the most prolific writers in the country. Presented in the form of short essays, the book is an exceptional endeavour of Major General Behl to encompass each and every aspect of the conflict.

The presentation of military and foreign affairs aspects of the conflict is especially praiseworthy. The essays in the book are logically divided under various heads reflecting critically on the weaknesses and immaturity of our politicians in the past as well as agencies responsible for intelligence gathering, and also on the inability of the army brass to perceive the direction and quantum of threat. While lauding the exceptionally strong rebuttal by the armed forces, the book also searches for the manoeuvring space for settlement of the Kashmir problem leading to peace in this subcontinent.

*Captain Rajiv Ojha, SM (Retd)*

**Indutva.** By M D Nalapat (New Delhi : Har Anand Publications Pvt Ltd, 1999), pp.296, Rs. 395.00, ISBN 81-241-0575-8.

The title of the book tends to suggest that the author may enunciate a new credo in preference to Hindutva. However, such an expectation was belied. He talks of Indutva in some abstruse context on India remaining true to its core traditions which make it the land of Mother Teresa, Abdul Kalam and Baba Amte. The book is a collection of articles and

commentaries written by the author in the nineties. These meander without any chronology, calendaring or coherence and deny any understanding on what the author's aim was in publishing these contents. Better editing perhaps could have given a direction and an objective to the publication. The author at some place does vaguely say that the purpose was to suggest an agenda for the Vajpayee Government. In articulation such a script is, however, absent.

Altogether, reviewing the book has been somewhat a bewildering experience.

*Air Marshal K D Chadha PVSM, AVSM (Retd)*

**Security, Espionage and Counter Intelligence.** By R N Manickam (IPS), (New Delhi : Manas, 2000), pp.145, Rs. 395.00, ISBN 81-7049-104-5.

Any epochal event in modern history triggers flood of reading material with a single minded goal of encashing on the popularity of the event that has just taken place. Kargil was one such event that is being encashed by many. For a plebian it was an emotional event that triggered national pride the way this war was won and sadness for the loss of young officers and soldiers who fought at unimaginable heights, under unimaginable conditions to keep the country's pride and integrity intact. For those who are looking for an intellectual presentation of assessment of events pertaining to the subject from a broader perspective this book is a very sad commentary.

Various security and intelligence related aspects had been our weak links in the modern history of India. The basic reason that gives rise to Kargil like events is lack of competence among officers and staff of the intelligence agencies. The same is compounded by lack of accountability in the event of failures. The personalised and graphic self promotion of the author seems to be the main aim of this book that on periphery dwells on the importance of related subjects. The title is an illusion that attracts the reader but after reading a few pages any discerning reader can make out that the book is more of a personal memoir of events.

The book recounts the rise of the author as a police officer and various appointments held by him. The political patronage with which IAS and IPS are widely associated is totally vindicated in the numerous instances narrated in this book. While he specifically targets Soviet KGB and acknowledges their crude but effective penetration in our embassies in East Europe, there is only one incident at a very junior level that is acknowledged by the author that was caught.

Inclusion of the Kargil chapter is basically to enhance the reason of

keeping such a sensational title that may draw an unsuspecting reader towards the book. This book is an example of the quality of our intelligence security, the officers who are responsible of promulgating it and why it fails when the nation needs it the most.

*Captain Rajiv Ojha, SM (Retd)*

**Restructuring National Security.** By Lieutenant General Ashok Joshi (New Delhi : Manas Publications, 2000), pp.372, Rs. 495.00, ISBN 81-7049-100-2.

There are certain issues pertaining to power, force doctrine and strength pertaining to the geopolitics of this country, which require deeper analysis – what is national security? What is the nature of conflict India is faced with? What all are the ingredients of policy and strategy? And, in this unfolding race to acquire the best in information and space technology, what is the relationship between fire and manoeuvre?

The author sifts through the work of renowned and influential strategists, philosophers and historians to answer these questions. It is to the credit of the author that nearly all disciplines of security and strategic studies have been covered to provide avenues for a proper national security doctrine to develop. Examples of Indian history and modern war histories are interposed to add empirical reasoning to theoretical arguments.

The author posits a novel system for management of national security and the mode of reorganising the Armed Forces. He equates national security organisation with the human brain, which is without a single centre of supreme authority and yet decides creatively. Participation in national security by the new age 'soldier-scholar-intellectual' is suggested. A networked architecture and composition of the National Security Council has been suggested with a mix of generalists and specialists.

The reorganisation of the Services with greater reserve component on a joint-cum-regional basis has been proposed, with a new, combined Ministry of Defence having two wings – one for Role, Tasking and Employment [operational] and the other for Raising, Equipping and Maintenance. The arguments and reasons put forth are relevant and it is hoped that the suggested improvements and changes will result in a positive feedback on what finally emerges from policy makers.

The book is targeted at the middle rung army officers in particular. The author has painstakingly researched and attempted to compress the wide and complex field of assessing national security in 13 chapters. The book is heavy, demanding and repetitive with an overlap of ideas and sudden flashes of observations and deductions. Better editing, more group

and paragraph headings and shorter sentences would have helped the readers.

A good book on national security. Recommended for libraries and those involved in national security policy making.

Colonel P K Gautam

**"British Diplomacy in Kashmir".** By Major K Brahma Singh (New Delhi : Reliance Publishing House, 1998), pp.328, Rs. 350.00, ISBN 81-7510-070-2.

Kashmir has been a subject of numerous publications over the past 50 years and promises to hold our interest for some more time. The present work is unique in the sense that it deals exclusively with the dubious role that the British Government and her agents played at the time of Indian independence in creating the seemingly intractable problem of Kashmir that has become the bane of this sub-continent. It is not so well known that there has been a general ban on access to the unpublished relevant official records of the period from 1925 onwards pertaining to Jammu and Kashmir and the Central Government (ostensibly to preserve the exalted memory of some of our political heroes), leading to vast gaps in the common perceptions relating to the events responsible for the Kashmir imbroglio. The author has tried to expose this British anti-India stance of the time as also the naivete of some of our towering leaders, through cogent reasoning based on his wide-ranging research of the available historical documents. The author is eminently equipped to tackle the subject having already researched and published certain Jammu and Kashmir related works earlier, including the *History of J&K Rifles (1820-1956)*.

Generally the author's presentation is in a very readable style except for the fair sprinkling of typographical and syntax errors as well as mixing up of the dates of certain historical events leading to confusion at times. Some little known facts like Dr Karan Singh's severe criticism of his own father (Maharaja Hari Singh of J&K) for having delayed the signing of the Instrument of Accession due to his endemic characteristic trait of indecision as per him, add to the interest value of this work. In addition the rise of Sheikh Abdullah and the National Conference in Jammu and Kashmir make for interesting and informative reading.

This book could prove to be a reminder to our policy makers to be ever vigilant in recognising as to when our supreme national interests are in jeopardy and act accordingly without being unduly affected by the burden of their own favourite theories as well as those of some of our



leaders, of whatever stature, which could militate against our national interests.

*Colonel Jagmohan Singh*

**Inside Diplomacy.** By Kishan S Rana (New Delhi : Manas Publications, 1999), pp.455, Rs. 500.00, ISBN 81-7049-102-2.

The Indian Foreign Service (IFS) is one of those few government departments that are least understood by the man in the street due its nature of work that rarely brings it in direct contact with the layman. This has generated a lack of visibility in the thinking of those in the IFS, which has enabled it to continue functioning with relative insularity by remaining away from the active national consciousness. They thereby avoid any kind of serious 'public-audit' that the other central services invite periodically which enables them to maintain their continued relevance to the emerging national realities. In the present context this book is extremely relevant and topical. The author has given a largely honest appraisal of various facets of the IFS without shying away from the fact of endemic corruption in its ranks where it comes in direct contact with the populace.

The author has, through some very readable prose, tried to tackle most areas of direct activity of the IFS as also those that have an indirect bearing on its functioning. The narrative has been liberally laced with his personal experiences and encounters that highlight the professional nature and approach of the Foreign Service Officers, while at the same time making the reading more interesting. It is easy to notice the author's pride in his service as also a veiled censure of the other elite central services at times, when he argues against any encroachments on the IFS turf which includes appointment of non-IFS personalities to head some of the foreign missions. However, these arguments would leave a discerning reader wondering whether or not it is a good idea to keep our Foreign Service so totally insulated as to deny it the all-round experience and expertise of the so called 'outsiders' who can impart a balanced character to this Service. The author has, however, acknowledged the all important and overarching linkages of present day diplomacy with national and world economy by keeping this as a central theme in the book. The author's cursory and dismissive treatment of the role and potential of Defence Attachés is a lapse that he could rectify in the future editions. Notwithstanding this, the book will serve as a very useful addition to our knowledge and functioning of the world of diplomacy with special reference to the IFS.

*Colonel Jagmohan Singh*

**Conflict and Community in Contemporary Sri Lanka : Pearl of the East or the Island of Tears?** Edited by *Siri Gamage and I B Watson* (New Delhi : Sage Publications, 1999), pp.355, Rs 295.00, ISBN 181-7036-864-2.

This is a collection of dissertations arranged essentially under four heads. To wit, the political prudence of the hostilities; their story per se; the commercial and emotional costs to the peoples of Sri Lanka, both the Sinhalese and the Tamils; and the differing viewpoints on various problems. Some of these essays establish historical perpetuity, some give ethnographic exposés relating to contemporary times, while the others engage the methodology of sociological and political ratiocination. The authors come from a melange of settings – some are Sri Lankan others are non-Sri Lankans, mostly Americans. Motifs that they dwell upon are :-

- The erosion of central authority and gradual breakdown of law and order.
- Agitation in the disturbed areas.
- The evolution of the philosophy of conflict.
- New paradigms of tenets.
- The need for assuaging the national pain and scars on the psyche.
- The wisdom of seeking outside intervention and regional collaboration in subduing the strife.

Those interested in the last mentioned topic will find much that they did not know about the Indian embroilment in the Sri Lankan politics and the IPKF in *Operation Pawan*. This essay titled "Internationalisation of the Tamil Conflict" (and its implications) has been well argued out by Rohan Gunaratna of the Department of International Relations, University of St Andrews, Scotland.

All in all, quite an insightful book.

*Lieutenant Colonel A K Sharma (Retd)*

**From Empire to Anarchy - Postcommunist Foreign Policy and International Relations.** By *Mette Skak*, Hurst and Company - London, 1996, pp.340, £ 14.95, ISBN 1-85065-242-2.

The events leading to the destabilisation of the former USSR have been intriguing. The author has delved into the dynamics of political, economic, ethnic factors and international relations, which precipitated the

disintegration of the USSR in just three years. The book highlights the problems of regional nationalism, ethnic and religious rivalries and the institutional weaknesses of the breakaway states.

An interesting and well researched book on the present state of the post communist USSR.

*Major General L S Lehl, PVSM, VrC (Retd)*

**Security Dilemmas in Russia and Eurasia.** Edited by Roy Allison and Christoph Bluth (London : Royal Institute of Foreign Affairs, 1998), pp.358, Price not indicated, ISBN 1-86203-016-2.

This is a collocation of sixteen expositions, based on papers presented during a research venture on "The Post-Soviet States and European Security", mustered in Moscow, Cologne and London in 1995. The text of this volume has been updated to events upto mid-1997, and as such it contains expert opinions of considerable contemporary import and value.

Security policies of the concerned states have been analysed in relation to their aspirations, capabilities; procedures; and impression on European security. It appears that the CIS-level and two-sided treaties that Russia has signed have sequentially been deranged. This has happened because of the diversification of security policy ligature in Eurasia, and by the breeding of new agreements without Russian support between CIS states and non-CIS states, or international organisations. Systematisation of the new Russian doctrine like 'promotion of the integration process on CIS territories' hover around the naive Realist sentiments of international politics and security. These are discussed in the light of self-proclaimed responsibilities and rights in the nearby regions. More realism has been recommended to Russia in the wake of its economic trials and tribulations in place of unviable security solidarity of the non-CIS concerns.

Strategic nuclear forces are regarded as sponsors of power and peace. The growing role of the nuclear forces on the military psyche is highlighted abundantly. Reorganisation and reduction of the conventional force levels is discussed in constraints of the resources crunch.

The cases of the three CIS states, namely, Georgia, Azerbaijan and Armenia, are dealt with in depth. Their relationship with Russia has been dictated by whether it is viewed as a friend or a foe. The cases of the five CIS states of Turkmenistan, Tajikistan, Uzbekistan, Khyrgystan and Kazakstan are examined in the light of the situation on the Tajik- Afghan border and the inherent threat from China. 'Afghanization' of some areas

is considered a distinct possibility. A case for the integration of the military of Kazakstan, Khyrgystan and Uzbekistan has been made out. The evolving bonding between NATO and these states has also been given wide coverage.

A workable Russian involvement in international peacekeeping operations is possible. Russian intervention in Tajikistan is said to have had an overall negative effect on the future of multilateral CIS conflict management. War in Chechnya, the greatest morbid event of the Russian armed forces since the demise of the USSR, is discussed in relation to the various themes raised in this book. The effects of the 'Chechnya Syndrome' on Moscow's efforts to sell its role to the CIS states has definitely received a setback, especially to those closer to the Caspian Sea. It has also cast a shadow on European security perceptions. The idea of collective security is discussed along with the means of projecting the Russian military attitude beyond the sovereign frontiers. The course of Russo-American relations is spelt out when dealing with matters like arms control and proliferation concerns. The European security environment is touched upon and special mention is made of the Russian overtures on the Organisation for Security and Cooperation in Europe (OSCE), opposition to NATO enlargement, and the emanating consanguinity with NATO, as now being seen in Kosovo.

The essays in this book should be essential reading for understanding the post-USSR configuration of security perspectives in Eurasia and Central Asia.

*Lieutenant Colonel A K Sharma (Retd)*

**The Conflict in Abkhazia : Dilemmas in Russian 'Peacekeeping' Policy.**  
*By Dov Lynch (London, Chatham House : The Royal Institute of International Affairs, 1998), pp.59, Price not indicated, ISBN 1-86203-027-8.*

The book provides an insight into the dilemmas being faced by the Russian Government in its policy towards Georgia and the conflict in Abkhazia and details the main characteristics of Russian peace-keeping policy since 1992. It differs significantly from the traditional UN peace-keeping operations that have shown willingness to use a high level of force. The Russian peace-keeping troops lack special training and the strict political control of mandate and rules of engagement that characterise international peace-keeping operations. The author gives the distinctly ethnic background of the Georgia-Abkhazi conflict and the Russian approach towards the conflict in 1992 and 1997.

The report concludes with two possible scenarios. One, that in the short run the Georgia-Abkhazia conflict will develop on similar lines as the Moldovan-Transdnistrian conflict. Scenario two is "No Peace No War" – similar to the Ngorno-Karabakh conflict since the ceasefire in 1994.

A well researched paper useful to scholars of ethnic conflicts and their history.

*Commodore R P Khanna, AVSM (Retd)*

**Central Asian and Caucasian Prospects : Russia and Central Asia – A New Web of Relations.** By Lena Jonson (UK : *The Royal Institute of International Affairs*, 1998), pp. 78, Price not indicated, ISBN 1-86203-022-7.

By and large, an average person is not aware of the political changes unfolding in Central Europe. Therefore, an indepth study by Lena Jonson, a senior research fellow at the Swedish Institute of International Affairs in Stockholm, is welcome. The author has discussed and analysed the prospects for Russia's policy towards the Central Asian States of Kazakhstan, Uzbekistan, Turkmenistan, Kyrgyzstan and Tajikistan in the commercial, military security, cultural and natural resources areas. The author has also discussed certain challenges being faced by the leaders of Central Asia such as economic assistance from Russia, Joint Military Forces for the CIS, a joint military command, territorial treaties, etc. In her concluding chapter Lena has once again highlighted the importance of economic over political and military strength.

A well researched, informative paper of interest to research scholars and officials of the Ministry of External Affairs dealing with Central Asia.

*Commodore R P Khanna, AVSM (Retd)*

**Central Asia and Caucasian Prospects. Uzbekistan : Politics and Foreign Policy.** By Annette Bohr (London : *The Royal Institute of International Affairs*, 1998), pp.69, Price not indicated, ISBN 1-86203-081-2.

This is a short study of Uzbekistan, a country one and a half times the size of Pakistan. Though the constitution of Uzbekistan, adopted in 1992, envisaged three centres of power, including the legislature and judiciary, a strong President in the form of Karimov, dominates the political set up since his election in 1991. A national referendum in 1995 extended his term up to the year 2000. He can be reelected.

Local government is run by Governors (*Hakims*) of the Republic of Karakalpakstan, in the West on the Aral Sea, which has its own Parliament, and 12 regions (*vilayats*). Karakalpakstan occupies a third of the land area and is sparsely populated. Two major cities are Tashkent and Samarkand. Tashkent, the capital, has its own *Hakim*. The governors hold office at the pleasure of the President. Over 10,000 local "mohalla" committees settle family and local disputes.

Uzbek is the sole state language. The Russian press has fared poorly, and the Russians are generally moving out. The Tajiks, with Iranian connection, dominate Samarkand. The Fergana Valley in the south, home to a quarter of the population, was the scene of disturbances between the Uzbeks, Turks and the Khyrgiz.

The people observe Islamic practices. It was from three city mosques of the Fergana valley in 1991 that the "Adolat" (justice) organisation grew. A voluntary Muslim militia, with a membership of some 10,000, enforced Islamic behaviour. In March 1992, the President launched a crackdown; its activities ceased. Protests have been made to Pakistan for training subversive elements. The Government uses these issues to keep civil liberties in control.

The book has also described the country's foreign policy and relations with the other five CIS states. On achieving independence, Uzbekistan has joined the Economic Cooperation Organisation (ECO). The United States treats ECO as a strategic partner. The volume of trade and influence has soared in the last two years.

A valuable study. Highly recommended.

*Major General Partap Narain (Retd)*

**Rethinking Central Asia : Non-Eurocentric Studies in History, Social Structure and Identity.** By Korkut A Erturk (Reading, UK : Ithaca Press, 1999), pp.202, £ 35.00, ISBN 0-86372-240-7.

With the emanation of half a dozen self governing Muslim states in Central Asia after the disintegration of the Soviet Union, worldwide attention has been drawn to the significance of this region in the geo-strategic, political and economic arena. So far, the focus has been mainly on three motifs. These are: the danger of clannish conflicts, the antagonism between non-clerical Turkey and fundamentalist Iran, and the threat posed to the West by the nuclear hardware in location in the hands of fledgling governments. These precepts are hackneyed and essentially Euro-centric in outlook. The six international contributors and editor of this compilation take a different tack. They address themselves to two new sets of issues.

These are : the manner in which Central Asia fits into world history and its specificity, social configuration and schematisation; the question of identity, the history of political self-articulation and tribulations of patriarchy in the history of the region. The prevalent notion that the centrality of the region to world economy ended with the opening of the sea route round the Cape of Good Hope is criticised. It is argued that it merely declined for a while, to rebound to its pre-eminence on the turn of this century.

A good backgrounder for any one planning to delve into the intricacies of a vitally important and potentially volatile region of concern to us.

*Lieutenant Colonel A K Sharma (Retd)*

**Back to Europe : Central and Eastern Europe and the European Union.** Edited by Karen Hender (London : UCL Press, 1999), pp.367, £13.95, ISBN 1-85728-887-4.

During the last few years, the EU (European Union) has been in the news. The economic integration among European countries culminated in the introduction of a single currency (the Euro) thus rendering their national borders meaningless. To the countries of Europe, national governments mean less and less to people as economics becomes more important than politics and power shifts from the state to civil authority.

*Back to Europe* is a very timely and comprehensive guide to the challenges of the EU's enlargement. It provides original research as well as being accessible to both readers with a background of EU studies, those interested in post-communist Europe and an average reader wishing to know more about the EU. The book in brief studies the following aspects.

- Significance of European Union and Eastern enlargement in the context of the new European order.
- The challenge that Eastern enlargement poses to the institutions of European Union and the prospects of membership for CEECs (Central and East European Countries).
- The internal politics of the applicant states, where different perceptions of advantages of EU membership may prove critical in the late stages of accession negotiations.

Seventeen authors mostly economists, politicians, scientists, diplomats and experts on international relations (mainly those with a knowledge of European affairs) discuss and analyse the above issues along with major developments in the accession of Central and Eastern Europe to the Union, appreciating that tensions and disagreements are certainly possible with the EU within NATO and among non-NATO members

of both institutions. But there are related developments underway that could at least mitigate various problems. As such the prospects of the Central and Eastern European countries being accepted by the Union are bright. The chronology of events given on pages xvi and xvii are very useful as an average reader may not be aware of various developments and could see at a glance the turn of events.

A well researched, informative and interesting book of particular interest to research scholars, politicians, diplomats and readers interested in international affairs. A good addition to all libraries.

*Commodore R P Khanna, AVSM (Retd)*

**End Game – The Betrayal and Fall of Srebrenica : Europe's Worst Massacre Since World War II.** *By David Rohde, (Boulder, Colorado : Westview Press, 1997), pp. 450, \$ 18.00, ISBN 0-8133-3533-7.*

The Balkans became the cockpit of the "old friends turned foes" amongst its Serb, Croat and Muslim populations in the last decade of the Twentieth Century.

The author has written a well researched account of the causes of the strife and the inadequacies of the UN with its decision-evading culture which made its "Peace Keepers" helpless to check the ethnic cleansing in Bosnia-Herzegovina. The Serbs undertook to change the demography of Bosnia through massacre, rape, and forceful expatriation of the Muslims till the NATO, side-lining the UN, interceded militarily to end the misery of the Muslim minority.

An interesting book which helps to understand the imbroglio in the former Yugoslavia and perhaps portend the future shape of things in today's unipolar world.

*Major General L S Lehl, PVSM, VrC (Retd)*

**Oil and Regional Developments in the Gulf.** *Edited by Rosemary Hollis (London : Royal Institute of International Affairs, 1998), pp.158, Price not indicated, ISBN 1-86203-077-4.*

With the increase in consumption of energy, there is an equally high level increase in the interest of major powers in the Gulf Region, which is the repository of at least 60 per cent of the world's known remaining oil reserves. The future of oil producers rests on market forces, technological developments, weather as well as the profound impact of consumer choices. And in all this the volatility of prices is the key. This issue has been very convincingly dealt with in the book.



It is however the indigenous political developments in the region that will shape the future. The chapters in this regard on the GCC, Iran, Iraq and Saudi Arabia are indeed illuminating. There is an oblique reference by one of the commentators that in the event of a confrontation with Iran, the US may be forced to use Iraq as a prop against it. Orthodoxy and conservatism of societies in the Gulf prevent any structural changes necessary to adjust to modern political necessities and to meet social and cultural demands of the younger generation ushered in by the information revolution. The US agenda for the Gulf has no social or cultural content. Any order imposed from outside, without due regard to these inherent dynamics is bound to be unsustainable. The final summation is that "re-integration of both Iraq and Iran in the region could happen gradually and most probably not without some new crisis points along the way".

A thought provoking edition. Students and researchers in Gulf studies will find this book a comprehensive resource.

*Air Marshal K D Chadha PVSM, AVSM (Retd)*

**The Struggle for Power in Arabia : Ibn Saud, Hussein and Great Britain 1914-1924.** By Haifa Alangari (UK : Garnet Publishing Co., 1998), pp. 290, £ 35.00, ISBN 0-86372-216-4.

Sharif Hussein Ibn Ali of the Hashemite ruling family of Hijaz and the Ibn Saud family, who were the rulers of Najd, had both been driven into exile. Though Hussein had a strong claim to succeed to the sharifate and Amirate of Mecca derived from traditional rights of blood descent from the Prophet, others in his dynasty contested this claim on the basis of long standing rivalry between Zaidi and Awuni branches. It was the Ottoman Sultan and Caliph, who excised his powers to appoint Hussein to be the Sharif and Amir of Mecca. In contrast Abdul - Aziz Ibn Saud, who struggled to wrest control over Najd, Hussein was formally placed in office in Hijaz by an external imperial force.

Sharif Hussein, had from the start, the advantages of his spiritual and temporal position as Sharif and Amir of Mecca as also the help of the coercive powers of the Ottoman garrison located in the Hijaz. In the initial stages Hussein made good use of his position to establish himself in Hijaz to the extent that Great Britain sought his help and alliance against the Turks during World War I. Whereas for Ibn Saud there was no such recognition till, by sheer dint of his personal abilities and astute military leadership he was able to establish himself as the ruler of Najd.

The author, has in this book, done an excellent comparison of the nature and foundation of the political authority of the two leaders : Sharif Hussein of Hijaz and Abdul-Aziz Ibn Saud of Najd along with the effect

of British intervention in the region during World War I. The British intervention has been related to the development and erosion of the two leaders respective bases of political authority. The author has brought out how by his astute political handling and his balancing act between the British and the Turks, Ibn Saud was not only able to establish himself in Najd, but was finally able to take over the Hijaz. In contrast Sharifs inept political handling and over-ambitious plans, which were beyond his means, resulted in his downfall and brought to an end a thousand years of Hashemite rule in Hijaz.

During World War I, to stimulate the Arab Revolt against the Ottoman Empire, the British had sought Sharif Hussein's help and had whole heartedly supported him and encouraged his Pan-Arab national ambitions. But post-war, the ideal of self-determination became Britain's priority. In so doing the British not only failed to support Hussein when Ibn Saud invaded the Hijaz, but they also prevented Hussein's sons, Abdallah and Faisal, who had been made rulers of the British mandated territories of Trans - Jordan and Iraq, from coming to their Father's aid. It was the astute Ibn Saud, who had not openly taken sides against the Turks during the Arab Revolt, was able to manipulate British aid to his own strategic advantage. The author has written an interesting account of an important period of Arab history.

Maj Gen S C Sinha

**A Rumor of War.** By Philip Caputo (London : Pimlico, 1999), pp.356, £ 10.00, ISBN 0-7126-6445-9.

Every war produces its literature. However, the literature produced during the war differs from what is created after the war. After the war, when novels like *From Here to Eternity* and *The Naked and the Dead* by ex-soldiers James Jones and Norman Mailer, respectively appeared, the American people were shocked. The realities of death and blood, violence and cruelty were so much different from the romantic versions written during the war effort.

*A Rumor of War* is a young US Army officer's memoir of the Vietnam War. The author Philip Caputo served as Lieutenant in the Marine Corps for two years in 1965-66 in Vietnam and got discharged. He later returned as a newspaper correspondent in 1975 to see the mighty American Army leaving Vietnam defeated and dishonoured. It was with much exuberance and excitement that the Marine battalion landed in Vietnam. After tough training in the US, the youngsters were confident of winning the war against the ill-equipped and irregular Vietcong in a short time. But the action in the jungle soon exasperated them. Fighting the unseen enemy

hiding in the tall grass, the incessant rain, wading through the marshes infested with mosquitoes and leeches, getting hit by sniper fire that came from nowhere, all disillusioned the soldiers. Living in perpetual fear and often seeing their dead comrades being taken away in body bags, prematurely aged the youngsters. The two years Caputo spent in Vietnam seemed two decades for him.

The young officer started suspecting the US cause in Vietnam. He felt they were fighting an unwanted war for an ungrateful country. The cruelties inflicted on the natives saddened him. Burning down of villages by napalm, killing people on suspicion, torturing men and women to get information, were all daily routine. The US soldiers were regularly felled by sniper fire. Men of his platoon, youngsters just out of training with romantic ideas of fighting and winning awards, were shot in unguarded moments and were reduced from martyrs to statistics of casualty. Ironically, Lt Caputo was charged with allowing two of his men to kill two Vietnamese, on a complaint from the South Vietnamese Army commander. He was court-martialled, but a bad turn for the US in the war made the authorities drop the charges and he was made to resign his commission.

Ten years later, Caputo came back as a correspondent to report the US evacuation from Vietnam. "The evacuees were processed and sent down to the scorching mess deck for a meal. Most of us were giddy with relief, but one disconsolate diplomat from the American Embassy just sat and muttered to himself, 'It is over. It is the end. It was a lousy way to have it end, but I think it had to end some way... The end of an era.' I supposed it was, but I was too tired to reflect on the historical significance of the event in which I had just taken part: America had lost its first war."

A moving true story of action, factual yet stranger than fiction.

*Subedar Major N Kunju (Retd)*

**SIPRI Year Book 1997.** (New York : Oxford University Press, 1997), pp.553, Price not indicated, ISBN 0-19-829312-7.

The 28th Edition of the SIPRI Year Book aims to provide an updated survey of the conflicts, military expenditures, arms trade, arms control, non proliferation and disarmament measures in 1996. Underlining the diverse influences likely to be exerted by the "lost" power Russia and the "emerging" power China in a uni-polar World polity, it has predicted the low probability of large scale wars and outlined the emerging portends of regional conflicts. The Yearbook is in three parts. Part I covers the security and conflict

trends including armed conflict prevention, management and resolution, major trends in the Middle East Peace Process and efforts for co-operative security in Europe. Ironically, the only inter-state conflict recorded for 1996 is between India and Pakistan, others being categorised as intra-state.

Part II on military spending and armaments covers military expenditure of major nations and security networks such as NATO, and trade in major conventional weapons. The general trend of decline in defence budgets is bucked by aggressive marketing of arms sales in South Asia and South America by major arms exporting countries and conglomerates. These forces seem to have developed markets in India and Pakistan and are subtly contributing to arms proliferation, which in turn is acting as a negative influence on peace initiatives. India's military R & D expenditure comes in for close scrutiny. At 6.5 per cent of the total military expenditure, it is seen to be steadily rising over the years. Arms production covered under the head of the World's 100 largest arms producing companies shows Indian Ordnance Factories at number 60, with HAL the only other Indian company ranked at 80. India ranks 9<sup>th</sup> as the major conventional arms recipient.

Part III, on non proliferation, arms control and disarmament, covers multilateral military related export control measures, nuclear arms control developments, CTBT, chemical and biological weapons and conventional arms control measures in detail. India's change in stand on CTBT comes up for great approbation. The need for continued confidence and security building measures between states even during conflictual conditions has been propagated as a measure for lasting peace. The Yearbook thus provides a very useful insight into the overall military conflictual environment and the state of the political, military, financial and industrial structure that supports these conflicts.

*Colonel Rahul K Bhonsle, SM*

**Reason and Rhetoric in the Philosophy of Hobbes.** *By Quentin Skinner*  
(Cambridge : Cambridge University Press, 1996), pp.477, £ 35.00, ISBN  
0-521-55436-5.

Quentin Skinner is Professor of Modern History at the University of Cambridge. Using a full range of manuscripts as well as printed sources, he has documented an entirely fresh interpretation of Hobbes's intellectual development, testing it against European moral and political thought of that period.

Across its ten well reasoned chapters, the present volume re-examines

the volition of the classical 'rhetorician', figure of the good orator, equating him with 'the good citizen who willingly serves the community by pleading for just verdicts in the courts and beneficial policies in the assemblies'. Compare the 'Subject', 'living in sole duty to obedient subjection to the laws' and the 'Citizen', capable of framing the laws as well administer them 'with duty of acting together with the state [Sovereign] and aiding in the distribution of justice'. In this major new work, the author has rescued Hobbes from intellectual isolation in which he is often discussed; 'the deductive, scientific model which Hobbes espoused' and which has since been largely dominant, and the contrasting 'humanist model,' with emphasis on dialogue and negotiation. The importance of the book lies in the wide range of interest for scholars of history, philosophy and politics.

*Colonel Balwant Sandhu, AVSM (Retd)*

**The Third Way : A Renewal of Social Democracy.** By A Giddens  
(London : Polity Press, 1998), pp.166, £ 7.99, ISBN 0-7456-2267-4.

The book is the published version of the intellectual and ideological precursor to the manifesto of the Labor Party in the UK. It seeks to inform the citizenry on the philosophical basis of the New Left. As is well known its author is the philosophical 'guru' of the British Prime Minister Mr Tony Blair.

The book is an outgrowth of the Professor's reflections on the state of the Left, and the possible nature of its counter-attack in this global Rightward moment. The long sway of Thatcherism required nothing less than an agenda for social renewal, through the deepening of democracy in terms of devolution, transparency, efficiency, and renewal of civil society. In this book, he elaborates on ideas he had broached in its influential predecessor *Beyond Left and Right*. Given the diluted initiation of neo-liberalism and the crisis of confidence of the Indian Left, the book is a virtual compendium of ideas for a centrist coalition - even though it is rooted in the Western experience. It could in that context serve as the entrenching of a "Third Way" in the Indian scene.

*Major Ali Ahmed*

## **Additions to the USI Library for the Quarter - Ending March 2000**

*(The books reviewed in January-March 2000 issue have been added  
to the Library during this quarter but not shown in this list)*

### **ARMS RACE**

1. Powaski, RE, **Return to Armageddon : The US and the Nuclear Arms Race 1981-1999.** New York : Oxford University Press, \$ 30.00, ISBN 0-19-510382-3
2. Dreyer, JT, **China's Political System : Moderation and Tradition.** 2<sup>nd</sup> Edn. Boston, MA : Allyn and Bacon 1996, \$ 27.50, ISBN 0-02-330561-4

### **COMMUNICATION**

3. Vilanilam, JV, **More Effective Communication : A Manual for Professionals.** New Delhi: Response Books, Rs. 325.00, ISBN 0-7619-9364-9

### **INDIA - NUCLEAR**

4. Raju, AS (ed) **Nuclear India : Problems and Prospects.** New Delhi: South Asian Publishers Rs. 350.00, ISBN 81-7003-240-7

### **INTELLIGENCE**

5. Lal, Bhure, **The Monstrous Face of ISI (Real Story Behind the Inter Service Intelligence Agency of Pakistan).** New Delhi: Siddharth Publications, Rs. 375.00, ISBN 81-7220-124-9

### **INTERNATIONAL RELATIONS**

#### **◆ BALKANS**

Glenny, M,

**The Balkans 1804-1999 – Nationalism, War and the Great Powers.** London : Granta Books, 1999, £ 25.00, ISBN 1-86207-650-4

#### **◆ RUSSIA-ASIA RELATIONS**

Chufrin, G,

**Russia and Asia : The Emerging Security.** SIPRI. UK : Oxford University Press, 1999 £ 40.00, ISBN 0-19-829654-1

## ◆ WEST ASIA

- Shlaim, Avi, **The Iron Wall : Israel and the Arab World.** London : Penguin Press, £ 25.00, ISBN 0-713-99410
- ISLAM**
6. Davis, JM **Between Jihad and Salaan : Profiles in Islam.** London : Macmillan, 1999, £ 16.99, ISBN 0-333-77230-X
- KARGIL**
7. Chowdhury, S, **Despatches from Kargil.** New Delhi: Penguin, Rs. 200.00, ISBN 0-14-029592-5
- MANAGEMENT**
8. Mittal, RK **Portfolio and Risk Management.** Delhi: Rajat Publications, 1999, Rs. 450.00, ISBN 81-87317-27-2
9. Virmani, BR **Managing People in Organisation : The Challenges for Change.** New Delhi: Response Books, Rs. 395.00, ISBN 0-7619-9447-5
- MEDIA AND POLITICS**
10. Badsey, S (Ed)  
Midlane, M  
(General Editor) **The Media and International Security : The Sandhurst Conference Series.** London: Frank Cass, £ 19.50, ISBN 0-7146-4406-4
11. Gunaratne, S, **Handbook of the Media in Asia.** New Delhi: Sage, Rs. 950.00, ISBN 0-7619-9427-0
- MIDDLE EAST POLITICS**
12. Milton-Edwards, **Contemporary Politics in the Middle East.** Cambridge : Polity Press £ 14.99, ISBN 0-7456-1472-8
- MILITARY HISTORY**
13. Sandhu, GS,  
(Maj Gen) **A Military History of Ancient India.** New Delhi: Vision Books, Rs. 995.00, ISBN 81-7094-375-2
- TERRORISM**
14. Sondhi, ML, **Terrorism and Political Violence: A Sourcebook. ICSSR Seminar.** New Delhi: Har-Anand Publications, Rs. 250.00, ISBN 81-241-0707-6

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